

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

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BALTIMORE, MAY 14, 1908.

### A POINTER.

May no Governor at the White House  
Conference sit upon a Constitutional  
fack.

### POOR SOUTHERN MOUNTAIN- EERS!

Southern mountaineers and the faith-  
ful souls who have been working with  
them for many years must, if they have  
not lost the sense of humor, enjoy the  
vivisection of themselves by "professors  
of secondary education" and the deep  
interest in them manifested by members  
of the faculty of the Teachers' College  
of New York city. Perhaps much of  
the furore over "education" in this  
country, and especially in the South,  
may be explained by the fact that the  
demand for products of teachers' col-  
leges, schools of pedagogy and schools  
of philanthropy is by no means equal  
to the supply. But the Southern moun-  
taineers and the earnest missionaries of  
various denominations among them  
ought not to be used as buffers.

### POLITICS AND IMMIGRATION.

Coincidentally with expositions at  
Southern ports by an official of the Na-  
tional Department of Commerce and  
Labor of the Government's plan to dis-  
tribute immigrants, a plan far beyond  
the safe province of the National Gov-  
ernment, circulars are being sent from  
New York city designed to further the  
work of an organization there seeking,  
in its own words, "to encourage the dis-  
tribution of Italian immigrants all over  
the country, especially in the agricul-

tural sections of the United States." The South and the country will do well to discourage at every point any move-  
ment, whether by a New York organi-  
zation, by transcontinental steamship  
companies or by the Federal Govern-  
ment, to distribute through the country  
any kind of immigrants, especially im-  
migrants who are speeded from their  
native countries by their own govern-  
ments. There is too much of the fine  
Italian hand touching big American  
politics visible in the immigration move-  
ment to this country.

### INDUSTRIAL CONTRACTION BY LEGISLATION.

The *Daily Express* of San Antonio, re-  
ferring to the iron-ore resources of  
Texas, and at the same time mention-  
ing the fact that the United States Steel  
Corporation is largely interested in de-  
veloping the iron-ore resources of Ala-  
bama, says:

Perhaps that is what the steel trust would  
do in the Texas fields, if permitted the priv-  
ilege, for it is quick to recognize a good  
thing after someone else has proven it to be  
a good thing. The iron ore is plentiful in  
the Texas field. Of that there is no doubt.  
To prove its quality and to make property  
now practically valueless worth millions of  
dollars will require something more than  
mere railing against the steel trust, bad as  
it is, or as it is assumed to be.

Texas might wisely learn a lesson  
from Alabama. Nobody in Alabama is  
complaining about the Steel Corporation  
being in that State. It purchased the  
Tennessee Coal, Iron & Railroad Co. at  
a cost of over \$30,000,000, which, added  
to the bond indebtedness of the prop-  
erty and to the improvements which the  
company is making on its plant, means  
that the Steel Corporation now has more  
than \$50,000,000 of good cash money  
staked upon the development of its  
properties in Alabama. It is expending  
some millions of dollars upon the en-  
largement of its plant, and will doubt-  
less continue to spend millions more as  
conditions justify. The purchase of  
the Steel Corporation is in no wise an  
injury to anybody in Alabama. On the  
contrary, the fact that it has this invest-  
ment in that State makes more valuable  
every acre of iron and coal property in  
the State; in fact, it makes more valu-  
able every piece of property of every  
kind in the State, for it means the big,  
broad development of Alabama's iron  
and steel interests on a scale commen-  
surate with the resources of that dis-  
trict. With its almost unlimited com-  
mand of capital and its ability to secure  
the very highest technical skill in the  
world, the Steel Corporation is able to  
give to the development of Alabama's  
iron interests a backing which they  
have never before had, and every iron  
company in the State is benefited by the  
work of the Steel Corporation. Not only  
does its work mean a greater and  
broader development of the iron and  
coal resources of Alabama than hereto-  
before was possible, but it means a  
strengthening of every business interest  
of the State, and we believe that with-  
out exception all other iron and coal

companies in the State appreciate very  
fully the fact that the investment of the  
Steel Corporation in that district is of  
great value to them, as to every other  
business interest there. Had not Ala-  
bama, under false leadership, made  
some of the blunders which have been  
committed in legislation in Texas, the  
influence of the investment of the Steel  
Corporation would have been far greater  
even than it has been. Stated in an-  
other way, had it not been for the fact  
that the Steel Corporation made its  
great purchase in Alabama, and by that  
very act thus helped to stem the down-  
ward tendency of things, the depression  
in that State would have been far greater  
than it has been.

It is true, as the *San Antonio Express*  
has put it, that Texas has great re-  
sources in iron ore. Its Llano ores  
rank by analyses as among the best ores  
known in this country or abroad, but  
they have lain dormant for the unnum-  
bered centuries of creation, and they  
are of no more value to their owners or  
to Texas today than they were years  
ago. In fact, the ore properties at  
Llano would have brought a higher price  
in the general business market in 1890  
than they would today. The difference  
is very largely due to the agitation  
which swept over Texas against corpo-  
rations and capital, beginning with the  
Alien Land law, which drove out of  
that State many millions of foreign  
money then invested in mortgages  
throughout the State. Texas, with re-  
sources as imperial as the vastness of  
its area, could have added probably a  
million more people to its population,  
and certainly a great many hundreds  
of millions of dollars to the value of its  
property, some thousands of miles of  
new railroads and a great increase in  
its manufacturing capital, had it not,  
under the leadership of men who were  
absolutely ignorant of the first prin-  
ciples of business conditions, driven  
out of the State much capital invested  
there and kept away still greater sums  
that would have come. And this de-  
velopment would have benefited every  
man, woman and child in the State.  
It would not and could not under any  
conditions have been injurious to the  
broad prosperity of the people, but, on  
the contrary, would have increased the  
value of the farm lands of the State,  
increased the growth of cities, made  
new markets for farm products, en-  
larged the field for the employment of  
laborers on railroads, in factories and  
on farms. Everywhere there would  
have been expansion, and expansion  
would have blessed and benefited every  
interest of all the people. But because  
the people blindly followed blind lead-  
ers there has been contraction as com-  
pared with what would have been the  
vast expansion possible.

What is true of Texas is true of the  
whole South.

### CONSERVATION.

This week's gathering at the White  
House at Washington is striking evi-  
dence of increasing interest of the gen-

eral public in the restoration and con-  
servation of the natural powers of the  
country. The set programme for the  
gathering is essentially but an enlarge-  
ment of a programme that might be ar-  
ranged for a forestry and reclamation  
convention. But there are indications  
that the conclusions of the conference  
may take a turn entirely different from  
the expectations or intentions of par-  
ticipants in it. Whatever happens, the  
fact should be emphasized that however  
important it may be for the natural re-  
sources of the country to be conserved,  
it is of far greater importance that the  
means adopted for the conservation  
shall be right means.

### WHITHER DO THEY LEAD THE SOUTH?

Objectors to the inclusion of the  
names of "eminent leaders of industrial  
thought and progress in the South" in  
criticism of the Ogden Movement should  
recall two or three facts. One is that  
promoters of the Ogden Movement have  
systematically employed the names of  
Southern educators to popularize it in  
the South or to meet criticisms of the  
Movement. Illustrative of that policy,  
which has been systematically pursued  
even up to the seed-sowing in Little  
Rock, Ark., last November for an in-  
vitation to the Conference to meet there in  
1909, is a letter written by Mr. Robert C.  
Ogden and published in April, 1903, in  
which, assuming to explain the Move-  
ment and mentioning the Conference  
for Education in the South and its  
Southern Education Board, he said:

Every approach to the Southern public has  
been through Southern men, either members  
or employees of the board. Among them the  
Hon. H. St. George Tucker, Dr. Robert Fra-  
zer of Virginia; \* \* \* Drs. Dabney, Clax-  
ton, Eggleston and Coon of Tennessee; Edgar  
Gardner Murphy \* \* \* and Booker T.  
Washington in Alabama; Dr. Edwin A. Al-  
derman in Louisiana.

Details of the work of these men would  
occupy a volume, but a careful study of  
what has been accomplished through confer-  
ences of county superintendents and appro-  
priations of money by the General Education  
Board (which is a corollary of the Southern  
Education Board) would surprise anyone not  
familiar with the subjects.

Complementary to that use in the  
South of Southern men—we have omit-  
ted from the quotation the names of  
men since dead and have not under-  
taken to distinguish between employees  
and members of the Board, since Mr.  
Ogden did not indicate which ones were  
not the employees—was the use in the  
North of Southern men in an editorial  
in the *New York Evening Post* of July,  
1903, the *New York Evening Post* with  
which Oswald Garrison Villard has long  
been identified, as follows:

The sensitiveness of the South is the more  
remarkable when one considers the readiness  
of its leading educators and politicians to  
accept Northern aid for its schools. South-  
ern Governors and college presidents have  
welcomed the Southern Education Board in  
its annual conferences and approved its rec-  
ognition of the national character of the  
South's educational problem. Northern aid  
is sought by many Southern schools and col-  
leges, and no criticisms of their educational  
shortcomings are ever resented. It is only  
when the North speaks out in behalf of the

negro that there is friction. Then are we told to mind our own business.

If Robert C. Ogden can employ the names of Southern men to back up the Ogden Movement, and if Oswald Garrison Villard's paper can express a natural conclusion that Southern men seeking educational alms are barred from criticising the donors of the alms, why should critics endeavoring to save Southern men from such humiliation be barred from drawing the proper moral at the proper time?

Ten days after the mixing of males and females of two races at a social meal in New York city the *New York Independent* met the thunder-roll by saying:

It was a very quiet affair, for they were most respectable people. The subject under discussion was caste prejudice, and it was treated conservatively. Not a word was said or a thing done in the least out of the way. We know, for one of our editors was there and spoke, as did an editor of the leading evening paper of this city. \* \* \* Not one of those present has any occasion to be ashamed of his part in it; in fact, their purpose and their conduct were highly creditable to them.

The editor of a leading evening paper here referred to was presumably Oswald Garrison Villard. We have noted nothing from him on the essence of this banquet save a communication published in his paper from a woman defending the banquet. The performance in the columns of the *New York Evening Post* of July, 1903, resenting criticism by alms-takers of the almsgivers would justify the *New York Evening Post* in suggesting that Southern educators who had been associated with Oswald Garrison Villard in raising a fund for a negro school in memory of a believer in "the equality of all men without regard to race, color or creed," or who had conferred an honorary academic degree upon Oswald Garrison Villard ought to be such "eminent leaders of educational thought and progress in the South" as to suppress criticism of Oswald Garrison Villard for his practical exposition at the Cosmopolitan Society's banquet of "equality of all men without regard to race, color or creed" and of themselves for identification with the Ogden Movement.

But whither are they leading the South?

#### STANDARDIZING NATIONAL DIET.

Nineteen solid carloads of strawberries passed through Rocky Mount, N. C., one day last week on their way to the Northern markets, seven of them bound to New York, six to Philadelphia, four to Boston, and one each to Pittsburgh and Syracuse. One railroad had up to 10 days ago hauled North over 1000 carloads of strawberries. Atlanta commission men calculate that, barring accidents, Georgia will ship this year at least 6000 carloads of peaches, valued at \$2,000,000, a record-breaking crop. Mr. J. M. Mallory, the industrial agent of the Central of Georgia Railroad, has recently made public figures showing that in Georgia there are now 6,498,155 bearing peach trees, 876,085 peach trees that will come to bearing this season, 90,345 bearing plum trees, 38,109 bearing pear trees, 1600 bearing fig trees, 2000 bearing cherry trees, 3015 bearing pomegranate trees, 900 bearing Japan plum trees, 4662 acres planted in watermelons, 4122 acres in cantaloupes and 521 acres in potatoes and other vegetables. From the coast country of Texas there is now a heavy movement of truck, one road handling 61 carloads in two days last week. The watermelon movement from Texas is about

beginning, and from the territory south of San Antonio it is expected that at least 1000 carloads of melons will move within the next two or three weeks.

These facts are indications of the steady expansion of the area in the South that is rapidly becoming the great market garden for the country and from which thousands of cars are annually carrying to Northern and Western markets fruits and vegetables approaching in value \$100,000,000. The trucking industry originating in the Norfolk section of Virginia about half a century ago has within the past 20 or 25 years, and especially during the past 10 years, extended down the coast to the Mexican border, and is firmly planted in the highlands of Arkansas, Tennessee and Virginia. The procession of early fruits and vegetables northward and eastward now begins to swell its annual volume from Texas and Florida in January or February, and the strawberries, watermelons, cantaloupes, peaches, apples, cabbage, kale, sprouts, potatoes, yams and other fruits and vegetables not only are striking evidences of the tendency to diversification in Southern agriculture, but are potent contributors to the standardization of the national menu.

The growth of the industry has had almost dramatic ramifications. In a comparatively small area near Wilmington, N. C., for instance, land that 10 years ago was worth hardly \$5 an acre is now held at \$250 an acre. From it are shipped annually from 300,000 to 500,000 crates of berries, the net profits from 5283 acres in strawberries in 1907 having amounted to \$366,873. Other net profits were: Lettuce, one and one-half acres, \$812.49; radishes, one-half acre, \$54.05; onions, two-fifths acre, \$58.95; cauliflower, one-ninth acre, \$57.40; beets, one-half acre, \$98.90; turnips, one-quarter acre, \$35.60; cabbage, one and one-half acres, \$123.58; beans, one acre, \$257.27; cucumbers, two-fifths acre, \$114.57; eggplants, one-half acre, \$392.17; tomatoes, seven-eighths acre, \$86.37; peppers, one-eighth acre, \$10.80.

One county in South Carolina near Charleston yields each season \$1,500,000 in cabbages or young cabbage plants, \$850,000 in Irish potatoes, \$560,000 in cucumbers, \$200,000 in greens, \$135,000 in strawberries, \$100,000 in asparagus, \$50,000 in green peas, \$10,000 in sweet potatoes and \$300,000 in beets, lettuce, radishes, etc. From the Chattanooga (Tenn.) section increasing shipments of strawberries are made annually; Florida's fruits and early vegetables are steadily increasing their variety and volume; Mississippi and Louisiana are becoming greater and greater factors in the industry with the perfecting of rapid transit to the Northern markets, and the Texas-coast country produces such things as 80 crates of carrots to the acre, netting \$250 an acre; between 400 and 500 crates of onions to the acre, netting \$250 an acre; 21 carloads of watermelons from 65 acres, and cotton grown on land after the truck had been harvested.

In the seaboard States the trucking industry has demonstrated on a comparatively small scale the value of drainage in bringing wet lands into production; it has been furthered in Texas by irrigation. Some irrigated land in Texas is rented by market gardeners at \$40 a year an acre, which is an indication of possible values for many thousands of acres of now almost valueless land. Only a beginning has been made in the utilization of such auxiliaries to farming in the South, but what can be done in trucking and what can be

done for trucking by such methods are the strongest kinds of argument for the reclamation of millions of acres of waste lands in the South.

#### BUSINESS AND POLITICS.

In his recent speech at St. Louis Chairman B. F. Yoakum of the Frisco-Rock Island system, referring to Presidential nominations, said:

Men in both political parties are to be had who are capable and competent properly to create, establish and carry out a policy that will guarantee to the American people an administration based upon sound business principles.

Commenting upon this, the *New York Commercial* says:

Which among the avowed or the "mentioned" aspirants for the Presidential nomination by either party measures fully up to this prospective requirement? Does any one of them? And wouldn't it be an altogether desirable thing, a most admirable thing, if the sound business sentiment of the country could thus impress itself on the nominee-makers in both conventions? The idea is a wholly novel one—and the "practical politicians" will no doubt stamp it forthwith as impracticable—something to be laughed down as a chance notion of theorists. But if something more isn't heard of this proposed movement in the very near future it will be only because the business men of the United States are not in such dead earnest over the need of a "business President" as they have everywhere been represented to be.

The *Commercial* is mistaken in its belief that the idea of a "business President" is a novel one. The suggestion has been made a number of times in recent years, but it has been impracticable, because business men of the country have permitted business selfishness to make impossible a union of business forces against emotionalism or the weight of dead party names that are most influential in nominating conventions. Business men have hesitated to make a square fight in the open and have fallen into the pit which they have dugged for others, in seeking, under more or less false pretense, to prevent the nomination of this or that undesirable party candidate or in bargaining with politicians who are above abiding by a bargain after its results for them have been reached. In short, business men have too often essayed politics upon every basis but an honest, business basis.

They may, it is true, have learned their lesson, but it is now too late for them to act upon their knowledge effectually as far as national party conventions are concerned unless they propose to make nominations of their own regardless of party affiliations and upon a platform calling for government according to the Constitution and the laws and upon business principles.

But the business men of the country can do effective work in politics in the conventions that shall nominate members of Congress. They have it within their power, if they choose, to prevent, in probably a majority of the Congressional districts of the country, the nomination of candidates whose sole stock in trade is demagoguery, and may assure the nomination and election of business men intent upon the best interests of the country and determined to do their duty in Congress, even if that duty should compel them to participate in proceedings of impeachment of anybody attempting to act officially in disregard or defiance of the Constitution of the country.

In his report for May 8 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 251 days of the present season was 10,516,407 bales,

a decrease under the same period last year of 2,197,171 bales. The exports were 6,743,666 bales, a decrease of 1,049,251 bales. The takings were, by Northern spinners, 1,504,489 bales, a decrease of 823,573 bales; by Southern spinners 1,851,200 bales, a decrease of 113,710 bales.

#### ADAPTABILITY IN INDUSTRY.

An illustration of how far-seeing men can sometimes shape their own business affairs to meet changing conditions may be seen in a letter from the Fairbanks Steam Shovel Co., Marion, Ohio. It was recently reported that this company had for several years devoted its plant almost wholly to the construction of land reclamation machinery, and that because of this it was not feeling the present business depression. Replying to an inquiry on the subject, the Fairbanks Company, under date of May 8, wrote the *MANUFACTURERS' RECORD*:

"Some years ago, when other manufacturers were working their shops overtime endeavoring to keep up with their orders in shovels, we turned our attention to the manufacture and perfection of dipper dredges, especially designed for the economical reclamation of swamp and waste lands. The measure of our success is indicated by the fact that at the present time \* \* \* we are operating our shops 13 hours per day, with unfilled orders on our books representing our maximum capacity for many months, and we consider the prospects better than at any time in the past. The reason for this, we believe, is that the reclamation of swamp lands goes back so close to the foundation basis of our national prosperity, which is land values and farm products, rather than the exchange of stock certificates of problematical value for money.

"Contrary to the opinion of very many manufacturers and producers throughout the country, we are of the opinion that conditions at the present time are to the student of political economy eminently satisfactory, and we regard the present situation as not only logical, but hopeful."

This indicates how one far-seeing concern, recognizing some years ago that land reclamation would become one of the leading lines of industry of the country, made ready for it, and why it is, therefore, now reaping a harvest of business activity.

#### GROWING NORFOLK.

The heart of an interesting and valuable pamphlet on Norfolk harbor, prepared by Mr. Walter Sharp of Norfolk, Va., is the reproduction on a reduced scale of Commodore Matthew F. Maury's equidistant map, first published in 1868. On this map is a line following the curvature of the earth drawn across the United States at every point equidistant from New York and Norfolk, and it shows that the territory of the United States north of the line and geographically tributary to New York includes but one-eighth of the territory of the country, while that south of the line, embracing seven-eighths of the territory of the country, is geographically tributary to Norfolk. Upon that background Mr. Sharp has drawn a vivid picture of the future of Norfolk as an incentive to investments in that region. Among the additional facts stated by him are: Population in city limits in July, 1907, 68,530; population of Norfolk county, 154,500; operatives in factories, 22,000; annual coal shipments from the Norfolk basin, 4,375,000 tons; estimated coal shipments in 1910, with the completion of coal carriers, 15,000,000 tons; annual truck shipments 3,052,706 tons; annual lumber shipments, exclusive of hardwood, from 35 local and adjacent mills, 700,000,000 feet; annual fertilizer shipments, 250,000 tons; railroad systems, all connected by a belt line, 9.



## A NATIONAL INVENTORY.\*

By RICHARD H. EDMONDS.

Let us, as a people, take an account of stock. Have we reached the zenith of our material greatness? Have we built enough railroads, and only need, as some have thought, to round out and perfect our present system? Have we used up our best resources in creating our present development, or have we only done a little pioneering work? Have we really seriously begun the development of our country? Is not all the work so far done merely the clearing of the land, the pulling up of the stumps, the digging of the ground and the laying of a foundation for our business structure? Have we not simply been the students in some great institution learning how to do things, and getting acquainted with our country and its resources? Or, changing the form of expression, is it not true that until now we have been day laborers, and apprentices, and mechanics only, but that, having passed this stage, we have advanced until we are ready to take charge of the shop and really do business? It behooves us, therefore, to study our tools, to see wherein the shop is deficient and wherein it is well equipped. Then we must know about our raw materials and the facilities of the shop to meet the world's competition. Let us look first over the old patterns and see what the shop has done in comparison with what other shops have produced.

### Our Industries Against the World's Industries.

Considering the United States as a great workshop—possibly the future workshop of the world—a summary of its size and its tools—its tools being its people and its resources—and of what it has already accomplished in comparison with the world's totals may be presented in the following table:

	World.	United States.	Per cent. United States.
Area in square miles.....	50,656,000	3,026,000	5.9
Population.....	1,650,000,000	86,000,000	5.2
Corn, bushels.....	3,285,000,000	2,592,320,000	78.8
Wheat, bushels.....	3,062,000,000	634,087,000	20.7
Tobacco, pounds.....	2,210,000,000	698,000,000	31.1
Cotton, bales.....	18,578,000	13,346,000	71.3
Pig-iron, tons.....	61,000,000	25,780,000	42.2
Petroleum, barrels.....	260,000,000	162,600,000	62.5
Copper, pounds.....	1,597,000,000	918,000,000	57.5
Gold, value.....	\$404,000,000	\$89,620,000	22.1
Silver, value.....	\$106,835,000	\$37,914,000	35.5
Sulphur, tons.....	832,644	298,859	35.8
Coal, tons.....	1,220,000,000	455,000,000	37.3
Phosphate rock, tons.....	3,632,000	1,978,000	54.4
Cotton spindles.....	122,880,000	26,000,000	21
Railroad mileage.....	570,000	225,000	39.5

In round figures we have 3,000,000 square miles out of the total 50,000,000 square miles of the world's area. We have a population of 86,000,000, or a fraction over 5 per cent. of the world's. With an area of 5.9 per cent. of the world's, and a population of 5.2 per cent., we are raising annually 43 per cent. of the world's total production of wheat, corn and oats. Of corn alone—one of the most important cereals known to mankind—we are producing 78.8 per cent.; of tobacco we are raising 31.1 per cent., and of cotton 71.3 per cent. Thus, in agriculture—the starting point of material progress, since man must first be fed and clothed—is found an illustration of our position.

This agricultural supremacy is fully matched in minerals and manufactures. Taking the most recent available figures, which include a few estimates for 1907, and the striking comparison is produced that we made last year over 42 per cent. of the world's iron production, or 25,780,000 tons out of a total of 61,000,000 tons. We mined 455,000,000 tons of coal out of a total of 1,220,000,000 tons, or 37.3 per cent. of the industrial energy stored in coal, the motive power of material progress. Of petroleum, which lights so large a portion of the earth, illuminating the adobe house in the wilds of the mountain regions of Mexico, the home of the dweller in the Andes, the hut of the mountaineer in the distant regions of the Himalayas, and likewise furnishes what is regarded as the best of lights in the dwellings of wealth and even of royalty, we produced last year 162,600,000 barrels, or 62.5 per cent. of the world's total of 260,000,000 barrels.

The development of electricity—the marvel of these latter ages—is dependent upon copper for transmission. Without it electric power, the electric car line and electric light would be almost impossible. In copper, as in petroleum, the United States holds a dominating position. It produced 57.5 per cent. of the world's output, or 918,000,000 pounds, out of a total of 1,597,000,000.

The foundation of the vast fertilizer industry in this country and Europe, which makes possible the restoration of fertility to wasted soils, bringing to all mankind the blessings of an increase in agricultural yield, is phosphate rock. Of this the United States mined 1,978,000 tons last year, or 54.4 per cent. of the world's total of 3,632,000 tons. Until a few years ago sulphur, so essential in the arts and sciences, and so large a factor in many lines of industrial work, was controlled by Sicily. Backed by the Italian Government, Sicilian sulphur dominated the sulphur trade of America as well as of Europe. Within the last few years this country has begun the development of its sulphur interests. Though the industry is yet in its infancy, it is producing 298,859 tons, or 35.8 per cent. of the total of 832,644 tons of the world.

We mined 35.5 per cent. of the world's silver, 22.1 per cent. of its gold, and have 21 per cent. of its cotton spindles. The railroad, which probably better than anything else expresses the measure of a nation's material advancement, is represented in this country by 225,000 miles out of a total of 570,000 miles for all the world, giving us 39.5 per cent. With 5 per cent. of the world's population, and less than 6 per cent. of its area, we have nearly 40 per cent. of the world's railroads. Moreover, our railroads are capitalized at far less per mile than the railroads of any other country. Their freight rates are from one-third to one-half as much

as the freight rates of Europe. They are more energetically managed and do more for the material upbuilding of the country, pay better wages and give better facilities than any other roads in the world.

### Our Steady Gain in Productive Power.

We are steadily gaining in our proportion of the world's productive interests, as illustrated in the fact that at the beginning of this century we were producing 34 per cent. of the world's iron, as against 42.2 per cent. now; 42.9 per cent. of petroleum, as against 62.5 per cent. at present; 55.5 per cent. of the world's copper, as compared with 57.5 per cent. today; 31.9 per cent. of the world's coal, as against 37.3 per cent.; and while we are now producing 35.8 per cent. of the sulphur, our total output seven years ago was less than one-half of 1 per cent. of the world's output. These figures indicate something of what we have done. They give us an insight into the character and extent of the product of this the world's busiest workshop. They furnish an unanswerable refutation of many of the arguments of the last few years against our business methods and against the solidity of our material progress. With 5 per cent. of the world's population, we have for some years been steadily gaining on the world in agriculture, in railroads and in manufacture.

### America's Coal Supply.

To the facts which tell of what has been done must be added a few others which throw light upon our resources in raw materials before we can fully measure the potentialities of the future. Have we resources sufficient to continue this tremendous rate of production? Or is it possible that we have only begun to work and that our resources are sufficient to go forward to a point where the statistics of today will seem as small as the statistics of fifty years ago would now be in comparison with what we are today doing?

Power is the fulcrum that moves the world. Coal is the basis of power. The utilization of rivers for the development of electrical energy is of comparatively recent origin; its possibilities are wonderfully great; but the chief source of the dynamic force back of the industrial movement of the world is coal. How stands the United States in its supply of coal as compared with other lands? We have 340,000 square miles of coal area. A very large portion of it has wider veins and a better quality of coal than any in Europe, except in a limited area. Against this vast domain Europe has 42,000 square miles. Great Britain, France and Germany have only 14,400 square miles. Of the total of 42,000 square miles, Russia has 25,000. All Europe has only one-eighth as much coal area as we possess. This foundation, eight times as great in area and probably twenty times as great in extent of resources, gives to the United States a primacy in the production of power which must make us the envied nation, not of Europe alone, but of the world. It is known that there are large areas of coal in China, some in Japan, and some in other lands, but geologists do not today know of as much coal in the rest of the world as is definitely known in the United States.

As illuminating the subject, take this one fact: If the coal in the State of West Virginia could be capitalized at 10 cents a ton—a triflingly small figure to represent the value of a ton of coal—the capitalized wealth of the coal of that State would be \$10,000,000,000. This would be about eleven times the combined capital of all the national banks in the United States. In fact, if West Virginia could capitalize its coal at 10 cents a ton, and find a market for the securities, it would be able to pay off the national debts of the United States, Great Britain and France; or, at present depressed prices, it could buy all the railroads in the United States, stocks and bonds included. West Virginia is marvelously rich in coal, but Kentucky is probably equally as rich. The coal and iron of Alabama combined ought in the future to be worth even more than the coal of West Virginia. There are other States in the possession of mineral resources that very nearly match these richly-endowed Commonwealths. With this simple illustration of what the capitalized wealth of coal in one State would be, some conception can be gained of how impossible it is to state in figures the wealth potentialities of this country. Our resources in water-powers available for utilization are estimated by experts to be as much greater than Europe's as is our supply of coal.

### Our Primacy in Iron and Steel.

In its influence upon a nation's advancement iron ranks next to coal. Every line of human activity is dependent upon iron in some form or in some way. The expansion of railroads, the development of steamship service on rivers, lakes and oceans; manufacturing of every kind; the erection of great office buildings; in fact, everything which pertains to modern material progress in peace or in war rests upon iron.

Two years ago Mr. J. Stephen Jeans, secretary of the British Iron Trade Association, called attention to the fact that from the beginning of recorded history "up to the end of 1904 the world's consumption of iron ores had aggregated 1,100,000,000 tons," whereas at the present rate of consumption the world would consume this amount of ore in less than ten years. In view of this expansion of the iron trade, Mr. Jeans said: "We would seem to be within a little more than half a century of an absolute iron famine. \* \* \* This fact raises problems of serious consequence to the world's iron industry and to the outlook for civilization itself. \* \* \* The question how far the ascertained iron resources of the world are likely to prove adequate to the maintenance of the world's increasing demands for iron and steel is one of the most important and interesting that can engage attention from the point of view of general trade and commerce. Iron being the daily bread of industry, this becomes a matter of urgent and constant concern, not to one industry or to one nation only, but to all industries and all nations almost alike. The time may come when iron ores will be recognized as a possession of such infinite and unapproached value that none can be purchased from foreign countries." And referring to the capitalization of \$1 per ton placed upon its ores by the Steel Corporation at the time it was organized, Mr. Jeans said: "Probably this was not overstated. On the contrary, I should be surprised if the directors of the Steel Corporation, in view of the fuller knowledge that they now possess as to the limited volume of iron ores at command in relation to the increased and increasing output of iron, would not place the value of their unworked ores at more than they did in 1901."

Measured by this standard of the enormous values of iron ores in affecting the world's trade—and Mr. Jeans ranks as one of the highest and most conservative authorities on metallurgical questions—how fares the United States in its

\*Written for the May number *American Review of Reviews* and reprinted in this form by courtesy of that publication.

supply of iron ore as a basis for the continued expansion of its iron and steel industry? A report made a few years ago to the Swedish Government estimated the total iron-ore supplies of all Europe at about 8,900,000,000 tons. Much of this is of very low-grade ores, running in some cases from 20 to 25 per cent. only in metallic iron. The correctness of these figures has been accepted by the leading experts of Europe, and, therefore, we may take it that, as far as human knowledge now goes, all Europe has only that amount of ore. In this country we have, according to the report of the United States Geological Survey, of known ores, 12,000,000,000 tons, or largely more than all Europe. Granted that other sources of supply may be found in other lands, it is quite probable that such discoveries will be fully matched by discoveries yet to be made in this country. When we have double, which we must inevitably do within the next ten or twelve years, the 25,000,000 tons of iron produced today, and are then making 50,000,000 tons, we shall still find our resources in iron ore equal to the demands of the times.

Thus in coal and iron—the two essential factors in the advancement of civilization and in the development of material interests—the position of the United States in comparison, not with Europe only, but with all the world, stands out so pre-eminently strong as to guarantee to this country an overmastering domination in metallurgical interests.

#### The Dominance of American Cotton.

Second only in the value of annual product is the cotton manufacturing of the world. No other industry except iron and steel exceeds in value the annual output of cotton goods. Though Europe has 86,000,000 spindles in its cotton mills, which with cognate interests represent an investment of \$1,500,000,000 or more, its leading cotton-consuming countries do not raise a pound of cotton. For three-quarters of a century its governments have sought to develop cotton-growing in other lands in order to lessen their dependence upon our Southern States. Their work has been in vain. Stronger today than ever before is our monopoly of the world's cotton trade. Every year adds to the influence and power of the South's position in this industry. We are raising an average of about 12,000,000 to 12,500,000 bales a year. This could be doubled by better cultivation and the better selection of seed without the necessity of adding a new acre to the land under cultivation. Whenever it may be needed, however, the number of cultivated acres can easily be doubled. If the world should eventually need, as probably it will, 40,000,000 or 50,000,000 bales, this section will find a way to supply it.

#### America's Position Contrasted With Europe's.

Turn from the comparison between the United States and the world, and contrast the position of our country with that of all Europe. Then it will be understood why American resources and American progress have at times stirred the envy, and possibly the cupidity, of European governments. Europe has 3,748,000 square miles in its area, but much of this is almost uninhabitable by reason of rigorous winters. On the other hand, the United States has 3,100,000 square miles, nearly all of which is susceptible of development and utilization for the support of population. Europe has 400,000,000 inhabitants, the United States 86,000,000. Europe mined last year between 650,000,000 and 700,000,000 tons of coal; the United States 455,000,000 tons. In Europe the production of coal per capita was 1.75 tons, and in the United States 5.29 tons. Europe is making one ton of pig-iron to every 15 inhabitants; the United States one ton to every 3.4. Europe, with its 400,000,000 people, has 195,000 miles of railroad; the United States, with 86,000,000, has 225,000 miles. Its production of wheat and corn is about 2,200,000,000 bushels a year; ours is 3,500,000,000 bushels. As stated, its cotton industry, which, including all its ramifications, gives support to probably 40,000,000 or more of its people and employs a capital of \$1,500,000,000 or more, is mainly dependent on cotton produced by us. Europe pays us \$500,000,000 a year for our raw cotton; and against the absence of any cotton production there this crop is annually worth to our farmers \$800,000,000.

#### Small Likelihood of Overcrowding.

Judging the future by the past, it is entirely safe to say that we shall add to our population during the next ten years about 20,000,000 people, and that by 1925 we shall have a total of between 125,000,000 and 130,000,000 inhabitants. By the middle of the century, or in 1950, we can count upon a population of 200,000,000. Without undertaking to compare the density of population in the United States with that of the more thickly settled countries of Europe, it may be stated that if the population of this country equaled per square mile the average in Pennsylvania at the time of the last census, we should have a total of 420,000,000 people. On the basis of Ohio's average the United States would have over 300,000,000, and on the average of population per square mile in New England the total would be 270,000,000. There is, therefore, no danger of overcrowding for many years to come.

#### Lands to Be Reclaimed.

The area is here, and likewise the agricultural resources for the maintenance of a vast population. Moreover, here are the raw materials for making of this the world's workshop. Rapid progress is being made in learning how to improve our soil in order to increase its yield. The work of irrigating millions of acres of land, the cultivation of which will furnish profitable employment to millions of people, is under way. Of even greater importance is the beginning made in the reclamation of our 75,000,000 acres of swamp, or overflowed lands, which when reclaimed will become the most valuable of all the farming lands of the country. When ready for the market these lands will be worth from \$50 to \$100 an acre or more, a total of between \$3,750,000,000 and \$7,500,000,000. When cultivated in the crops for which they are so well suited, these lands will produce more than \$100 worth a year per acre. The total value of the farm crops of the United States last year was \$7,400,000,000. It is quite safe to say that the reclaimable swamp lands and the lands which are now being saved from the desert by irrigation will within the next generation or so produce a greater annual value than the total present value of all the farm products of the United States.

#### Unique Advantages for International Trade.

These facts, picked here and there merely to indicate the strategic position of the United States in the world's material development, do not by any means tell the full story. As our natural resources give us unequaled advantages, so our geographical location gives us a strategic position to command the world's trade.

Midway between Europe, the Old World's center of civilization and activity, and the Orient, the coming center of world activity, stretching from ocean to ocean, the United States holds a unique position in the world's geography. This land of ours is Nature's storehouse of wealth. Here is a region unmatched on earth—a country so fertile of soil, so burdened with coal and iron and copper and other minerals, that we do not have to concern ourselves for generations to come about their exhaustion. Consider the whole earth; study the geographical location of all lands, their resources in climate, in soil, in minerals, in population, and the things which make for the highest development of mankind. The more you study, the more you comprehend the foundations of all human advancement, mental and ethical, the more you will be dazzled at the vastness of our opportunities.

#### Will Europe Resist Our Advance?

Looking out from our mountain peak and forgetting the clouds beneath us, which must disappear, there is but one speck upon the horizon. It may vanish before the rising sun of the ever-expanding power of Christianity, but the speck is there today. It is the danger that Europe, realizing our tremendous advantages, seeing the limitless wealth of the future if we are left to continue our development, and knowing that such wealth and power would make us the arbiters of the fate of the world's trade and commerce, might combine to try to crush and control us before we reach that position. Many a nation has been literally forced by economic conditions to fight for its existence, and all Europe is so dependent upon us that it is not surprising that our very progress creates enmity. Without our cotton England and much of the continent would be bankrupt; without our foodstuffs prices would so advance that millions throughout Europe would starve; without our phosphate rock Europe's soil would lack its accustomed fertilization; without our oil a large part of the world would be in darkness; without our copper the electric advancement of Europe would be seriously restricted; without our turpentine and rosin there would be a famine in naval stores abroad. The weakness in Europe's position through its dependence upon this country for these things is the strength of our position. To have and to hold is one of our great problems. We have these limitless resources. Will the world be content always to let us keep them without fighting for them?

## COLUMBUS: ELECTRIC CITY OF THE SOUTH.

[Special Correspondence Manufacturers' Record.]

Columbus, Ga., May 9.

The city of Columbus, Ga., is dominated by enterprise. With a splendid water-power from the Chattahoochee river, it has developed manufacturing interests that put it in the forefront of vigor and aggressiveness. The ordinary mental process will naturally guess that it is strong in cotton-goods manufacture, but it is not fair either to the guesswork or to the city to stop there. There are more cotton mills than any one other industry, but add to that the cotton compresses and makers of ginning machinery, oil mills, foundries and machine shops, agricultural implement works, syrup, candy, fertilizer and other factories, and include the ice machine makers, six or seven brickyards, the showcase company and two school-desk concerns, one operating and the other building its plant, and the mind is out-guessed and stands convicted before the real facts. One of the newest enterprises is the manufacture of trucks especially adapted to cotton mills. No wonder that this town has a payroll each week probably exceeding \$35,000.

There are several banks, of course, and at least two of them have savings departments, and the city is the home of one insurance company of which Hon. Rhodes Brown, Mayor of the city, is president.

The city is unusually well equipped with churches, libraries and schools. The public-school system, under the direction of Prof. C. B. Gibson, has been developed to a high degree, ranging from the kindergarten to the high school, and, of course, including manual training.

Perhaps the biggest thing that Columbus has undertaken in an educational way is the establishment of the Secondary Industrial School. Probably the best description of the purposes of this institution is to call it an academic trade school of high-school rank. This differs from the ordinary high school in at least one fact, that no foreign languages are taught. Mathematics, English history and science with a trade comprise the teaching for the individual. The trade, however, is elective, and in that sense the school varies again from the manual training school, where elements of various trades are taught. It

is free to boys and girls of the city over 14 years of age, and non-residents may enter at a small fee. In this Secondary Training School the boy has his choice of textile work, mechanic arts and the commercial course. In the textile department there is installed a complete line of machinery used in the cotton mill, carrying the student from the initial process of taking the cotton from the bale and running up to the spinning machinery and to the weaving and knitting machinery. The student is in direct personal touch with all of the operations.

In the mechanic arts department there are the woodworking shops, in which are band saws, lathes, planers, boring machines and various woodworking machines. Carpentry and joinery and patternmaking are taught, and it is remarkable what proficiency the scholars have attained so far. As an example, the tables which the girls use in their domestic science department were made by the boys in the carpentry division. In the forge room there is a complete equipment of forges, with exhaust blower and a gas forge for quick work. In the machine shop are found lathes, milling machines, drills and shapers among the machine tools, with, of course, the various appliances and tools which accompany them, and already the boys have made some splendid appliances for the machine tools, procuring the steel in the city and making the completed article in the school. The course in mechanical drawing is one of the most thorough and complete that could be found anywhere, and it is interesting to note that the drawing boards and T squares were made by the boys themselves.

The school has enlisted the co-operation of the mills and shops in the city, and consequently at the end of the term of three years the boys serve an apprenticeship of three months in actual work. Report cards are filled out and signed by the foremen and superintendents of the shops and filed with the school; when these are satisfactory a diploma is issued to the student.

In the commercial section business methods are taken up very completely.

Not only is the teaching of that shorthand, typewriting and bookkeeping, as



would be expected in a business course, but the scholars are trained in the use of vertical systems of filing and are required to carry out complete business transactions. They organize banks and carry out the work and they are trained also in the organization of partnerships and corporations, so that they may understand the responsibilities of each and the method of transacting affairs. They are also instructed not only in the forms, but in the meanings of leases and contracts, and notes, drafts, checks, etc., and have besides their own form of currency for the handling of business. There is probably nothing that will come up in a days' business in an office that is not put before the scholars in this department, even to the making of deposits in the bank, having bank books balanced and all that sort of thing.

The girls have a part in the textile department and the commercial department with the boys, and in addition to that they have their own department of domestic science, comprising cooking, millinery and sewing. The principle laid down by Professor Gibson is that a girl, entirely irrespective of the position in which she finds herself by birth, should know the things required of her in the home, and all the instruction which the girls get in the domestic science department is to fit them to take their places intelligently in their own homes.

The school building is a handsome one, containing about two dozen rooms. It occupies a place with a large area surrounding it, and eventually the present will be only one of about 10 buildings to be erected as occasion requires. Professor Gibson is possessed of the prophetic eye which can see a large growth in industrial education, and while the present building stands alone, plans have already been made for the addition of the other buildings, including two dormitories, six shops and a power-house.

The public school board has also maintained a manual training school for negro boys and girls that is doing splendid work in inciting them to self-sustaining labor. The boys have carpentry and blacksmithing, while the girls are taught sewing, cooking and laundering. The work that the boys do is very good. Iron work of all sorts is produced by them. They make fancy grilles, fireplace appliances and horseshoes, as well as other things, and to a person who is not a blacksmith or an ironworker or a horseshoer it is surprising to know how many different kinds of shoes there are for animals. In the carpenter shop the boys have taken great pride in making fancy tables and tabourettes, small boxes, gavels and other finished pieces that are rounded or tapered, all the work being done by hand. Columbus not only prizes itself on giving this instruction to the negroes, but giving it in such a way that scholars on completing their course are enabled to take up work under ordinary conditions. The boys do not use machine tools nor woodworking machinery. Their products are the result of hand labor, and they are therefore fitted to undertake pieces of work where a mechanic schooled in the use of machinery would be entirely out of place.

In the girls department great progress has been shown in training them for the positions they are best suited to occupy. Girls of 15 and 16 years of age are being trained so that they may take positions in families as laundresses, cooks or seamstresses in order that they, too, may become self-supporting. And the girls are daily taught that the ability to do one or two things well and stick to it will be productive of good to themselves as contrasted with the hit-and-miss idea that so many of their race have fallen into.

The feeling concerning general business conditions in Columbus is well expressed by a statement made by the general superintendent of one of the largest companies, who said:

"It is very gratifying to know that the business conditions here have been only slightly disturbed by the financial upheaval in the North. Until April 1 all industries in the city operated full time with the exception of a few of the machine shops. Since then the usual operating time of the mills has been curtailed about three hours a week. Local trading among the retail merchants of the city has been exceedingly good, and the larger merchants report increases in their sales over the corresponding period of last year. The outlook is considered to be very encouraging. It is gratifying to note that more buildings are in process of construction at the present time than has been experienced in years when the money market was normal."

The Columbus Power Co. has been one of the strong forces for industrial advancement. It has maintained a publicity campaign in the advertising pages of the MANUFACTURERS' RECORD and by a series of individual letters sent out to manufacturers in various parts of the country. The results have been more than gratifying, and it is quite likely that additional power will soon be arranged for. Indeed, a conference between Mr. Chas. F. Wallace, president of the Columbus Railroad Co., the Columbus Power Co. and the Gaslight Company of Columbus, Mr. H. H. Hunt, manager of the Southeastern companies of Stone & Webster and Mr. A. W. Hunking, hydraulic engineer for Stone & Webster, was being arranged to discuss this very thing.

On March 1 Mr. F. E. Reidhead, manager of the Columbus Railroad Co., the Columbus Power Co. and the Gaslight Company of Columbus, was transferred to the management of the Paducah Traction & Light Co., all of these companies being under the general management of the Stone & Webster Management Association of Boston. Mr. John S. Blecker, formerly manager of the Paducah Traction & Light Co., fills the vacancy at Columbus caused by Mr. Reidhead's transfer. Both Mr. Reidhead and Mr. Blecker stand high in the esteem of the Stone & Webster Management Association, and are considered two of their most efficient managers. Both of these gentlemen have settled down to business in their respective new localities, and are continuing the same progressive policies practiced by the general management.

Mr. Geo. K. Hutchins, contract agent of the Columbus Power Co., was transferred to the Savannah Electric Co., where he will continue the same line of work he so successfully prosecuted at Columbus. A very gratifying increase in the output of the Columbus Power Co. is the result of Mr. Hutchins' systematic solicitation of business. Through his instrumentality a number of large industries have been located in Columbus, and today practically all of the wheels of industry of the town are turned by electric power supplied by the Columbus Power Co., and the constant inquiries relative to cost of power in Columbus indicate that the publicity campaign conducted by Mr. Hutchins has attracted the attention of many large manufacturing establishments who are in search of cheap power, favorable labor and transportation facilities, pre-eminently found in Columbus. The work that Mr. Hutchins has been doing in Columbus has been taken up by Messrs. Cabot Stevens, electrical engineer for the company, and C. M. Young, general superintendent of the Columbus Power Co.

Columbus has a right to be proud of its work. It is not a large city. It is hard, as a matter of fact, to get from the citizen a correct statement of population. Unlike most other cities, there is a conservatism about the population figures that is surprising. The tendency of every man in the city seems to be to tell the story correctly without exaggeration, which is in itself a remarkable condition of affairs. A great deal of work is being done in Columbus, and there is a civic pride which causes the citizens to work hand in hand

for advancement. One of the strong evidences of this condition is shown in the fact that when the city revenues were decreased by the entrance of prohibition the citizens voted on the question of income and by a decided advance over the required two-thirds vote favored an increase in the tax rate so that the city might not be hampered in its progressive development.

It is a city of active energy intelligently directed, and is a splendid example of Southern industry. A. C. BOUGHTON.

## MACHINERY AND SUPPLY MEN IN CONVENTION.

[Special Correspondence Manufacturers' Record.]

Richmond, Va., May 13:

The joint three days' convention of the Southern Supply and Machinery Dealers' Association, the National Supply and Machinery Dealers' Association and the American Supply and Machinery Manufacturers' Association was opened this morning in separate executive sessions, which were for members only, and which consisted of such routine business as reports of officers, appointment of nominating committees and presentation of resolutions. In the afternoon a joint open session was held, presided over by President C. H. Briggs of the Southern Supply and Machinery Dealers' Association, with addresses by President Briggs, President George Puchta of the National Association and President M. W. Mix of the American Association. In the evening a smoker and vaudeville performance was held in the Jefferson auditorium.

At the joint executive session to be held tomorrow morning addresses will be made on "Resale Prices," by F. A. Hall of the Yale & Towne Manufacturing Co., New York city; "Salesmanship," by W. E. Gerow of the Atlantic Supply Co., Jacksonville, Fla.; "Plain Talk to Jobbers," by D. K. Swartwout of the Ohio Blower Co., Cleveland, Ohio, and "Advantages of Cooperation in Supply and Machinery Business," by W. M. Pattison of the W. M. Pattison Supply Co., Cleveland, Ohio. These addresses will be limited to 15 minutes each, to be followed by five-minute open discussions, while general discussions will be brought out by the presiding officer. In the afternoon a joint executive session will be held for the machinery and supply members who are also engaged in the machinery business, and also an executive session of the American Supply and Machinery Manufacturers' Association. In the evening the banquet will be held, the principal addresses at this being one on "Commercial Fraternity," by President C. A. Moore of Manning, Maxwell & Moore, New York city, and "Benefits Derived from Trade Organizations," by Commissioner Robert Wuest of the National Metal Trades' Association, Cincinnati, Ohio.

Friday will be devoted exclusively to separate and joint executive sessions, in which final reports of committees will be made and new officers elected and installed. In addition to the smoker and banquet provided for the entertainment of the delegates, the attending ladies will be taken on trolley rides to points of interest in the city and to the Lakeside Country Club, where a luncheon will be given in their honor.

The joint entertainment committee includes Messrs. Levin Joynes, chairman, Southern Railway Supply Co., Richmond, Va.; Alvin M. Smith, secretary, Smith-Courtney Company, Richmond, Va.; Wm. M. Hood, Lunkenheimer Company, Cincinnati, Ohio; Hunter B. Frischkorn, Richmond, Va.; A. J. Battle, Jr., Glacier Metal Co., Richmond, Va.; E. A. Ludden, Detroit Oak Belting Co., Detroit, Mich.; W. B. Yost, McIntosh Hardware

Corporation, Cleveland, Ohio; Wm. T. Johnston, Wm. T. Johnston Company, Cincinnati, Ohio, and W. A. Somers, Somers, Fittler & Todd Company, Pittsburg, Pa.

The officers and members of the different associations are as follows:

### SOUTHERN SUPPLY AND MACHINERY DEALERS' ASSOCIATION.

C. H. Briggs, president, Briggs-Weaver Machinery Co., Dallas, Texas; J. C. Miller, first vice-president, the Miller Supply Co., Huntington, W. Va.; E. A. Peden, second vice-president, Peden Iron & Steel Co., Houston, Texas; Alvin M. Smith, secretary-treasurer, Smith-Courtney Company, Richmond, Va.; J. A. Riechman, chairman, Riechman-Crosby Company, Memphis, Tenn.; H. C. Clark, Charlotte Supply Co., Charlotte, N. C.; John G. Christopher, John G. Christopher Company, Jacksonville, Fla.; J. B. Simmons, Woodward, Wight & Co., New Orleans, La., executive committee.

#### Alabama.

Alabama Machinery & Supply Co., Montgomery.  
Anniston Supply Co., Anniston.  
Southern Hardware & Supply Co., Mobile.  
Young & Vann Supply Co., Birmingham.

#### Arkansas.

Fox-Harris Machinery & Supply Co., Pine Bluff.

#### Florida.

Knight & Wall Company, Tampa.  
John G. Christopher, Jacksonville.  
Atlantic Supply Co., Jacksonville.

#### Georgia.

Cotton States Belting & Supply Co., Atlanta.  
J. S. Schofield's Sons Company, Macon.  
Lombard Iron Works & Supply Co., Augusta.  
Georgia Supply Co., Savannah.  
J. D. Weed & Co., Savannah.  
Hartfelder-Garbutt Company, Savannah.

#### Louisiana.

W. K. Henderson Iron Works, Shreveport.  
Fairbanks Company, New Orleans.  
Woodward, Wight & Co., New Orleans.  
Whitney Supply Co., New Orleans.  
Gibbens & Stream, New Orleans.

#### Maryland.

Fairbanks Company, Baltimore.  
Fred C. Dreyer Supply Co., Cumberland.

#### Mississippi.

Komp Machine Works, Hattiesburg.  
Union Manufacturing & Supply Co., Hattiesburg.

#### Missouri.

L. M. Rumsey Manufacturing Co., St. Louis.

#### North Carolina.

Hyman Supply Co., Newbern.  
Charlotte Supply Co., Charlotte.  
McKeel-Richardson Hardware Co., Washington.

#### South Carolina.

Cameron & Barkley Company, Charleston.  
Bailey-Lobby Company, Charleston.  
Kaminski Hardware Co., Georgetown.  
Gibbes Machinery Co., Columbia.

**Tennessee.**

Tom Fritts Hardware Co., Chattanooga.  
Nashville Machine Co., Nashville.  
Keith, Simmons & Co., Nashville.  
J. H. Fall & Co., Nashville.  
E. C. Atkins & Co., Memphis.  
Pidgeon Thomas Iron Co., Memphis.  
Riechman-Crosby Company, Memphis.  
Livermore Iron Store, Memphis.  
Mitchell Powers Hardware Co., Bristol.  
Tennessee Mill Supply Co., Knoxville.

**Texas.**

Walter Tipps, Austin.  
Lufkin Foundry & Machine Co., Lufkin.  
Briggs-Weaver Machinery Co., Dallas.  
Peden Iron & Steel Co., Houston.  
San Antonio Machine & Supply Co., San Antonio.  
Hardwicke-Etter Hardware Co., Sherman.  
Waco Machinery & Supply Co., Waco.  
Walter Connally & Co., Tyler.  
Texas Manufacturing Co., Fort Worth.

**Virginia.**

Stratton & Bragg Company, Petersburg.  
Charles Leonard, Petersburg.  
Stockell-Myers Hardware Co., Petersburg.  
Southern Railway Supply Co., Richmond.  
Hunter B. Frischkorn, Richmond.  
J. L. Lindsay, Richmond.  
Smith-Courtney Company, Richmond.  
Henry Walke Company, Norfolk.  
Southern Supply Co., Norfolk.  
S. M. Price Machinery Co., Norfolk.  
W. M. Whaley & Co., Norfolk.

**West Virginia.**

Capital City Supply Co., Charleston.  
West Virginia Mine & Mill Supply Co., Clarksburg.  
Bluefield Hardware Co., Bluefield.  
Superior Supply Co., Bluefield.  
Banks Supply Co., Huntington.  
Miller Supply Co., Huntington.

**NATIONAL SUPPLY AND MACHINERY DEALERS' ASSOCIATION.**

George Puchta, president, the Queen City Supply Co., Cincinnati, Ohio; Henry Prentiss, first vice-president, Prentiss Tool & Supply Co., New York, N. Y.; W. M. Pattison, second vice-president, Pattison Tool & Supply Co., Cleveland, Ohio; A. T. Anderson, secretary-treasurer, 41 Wade Building, Cleveland Ohio; Chas. S. Farquhar, Chandler & Farquhar Company, Boston, Mass.; James W. Wright, J. W. Wright & Co., St. Louis, Mo.; George T. McIntosh, McIntosh Hardware Corporation, Cleveland, Ohio; Chas. A. Strelinger, Chas. A. Strelinger Company, Detroit, Mich., executive committee.

**California.**

Harron, Rickard & McCone, Los Angeles.  
Henshaw, Bulkley & Co., Los Angeles.  
Harron, Rickard & McCone, San Francisco.  
Henshaw Bulkley & Co., San Francisco.  
Pacific Tool & Supply Co., San Francisco.

**Colorado.**

Scott Supply & Tool Co., Denver.

**Connecticut.**

Hawley & Co., T., Bridgeport.  
C. S. Mersick & Co., New Haven.

**Illinois.**

Machinists' Supply Co., Chicago.  
Manning, Maxwell & Moore, Chicago.  
McDowell, Stocker & Co., Chicago.  
O. L. Packard Machinery Co., Chicago.  
H. Channon Company, Chicago.

**Indiana.**

Vonnegut Hardware Co., Indianapolis.

**Massachusetts.**

Chandler & Farquhar Company, Boston.  
Prentiss Tool & Supply Co., Boston.

**Michigan.**

T. B. Rayl Company, Detroit.  
Chas. A. Strelinger Company, Detroit.  
C. C. Wormer Machinery Co., Detroit.

**Minnesota.**

Northern Machinery Co., Minneapolis.

F. E. Satterlee Company, Minneapolis.  
Robinson & Cary Company, St. Paul.

**Missouri.**

A. B. Bowman, St. Louis.  
W. R. Colcord Machinery Co., St. Louis.  
Wm. C. Johnson & Sons Machine Co., St. Louis.  
J. W. Wright & Co., St. Louis.  
Bunting-Stone Hardware Co., Kansas City.  
H. J. Brunner Hardware Co., Kansas City.  
English Iron Works Co., Kansas City.

**New York.**

Beals & Co., Buffalo.  
Buffalo Wholesale Hardware Co., Buffalo.  
Weed & Co., Buffalo.  
James Beggs & Co., New York.  
Peter A. Fraser & Co., New York.  
Manning, Maxwell & Moore, New York.  
James J. McCabe, New York.  
Montgomery & Co., New York.  
Patterson, Gottfried & Hunter, Ltd., New York.  
Prentiss Tool & Supply Co., New York.  
Louis Ernst & Sons, Rochester.  
Burhans & Black Company, Syracuse.  
Syracuse Supply Co., Syracuse.  
C. H. Wood Company, Syracuse.  
Troy Belting & Supply Co., Troy.

**Ohio.**

Boebinger Hardware Co., Cincinnati.  
Cincinnati Mill & Mine Supply Co., Cincinnati.  
V. N. Devou & Co., Cincinnati.  
Wm. T. Johnston Company, Cincinnati.  
E. A. Kinsey Company, Cincinnati.  
E. K. Morris & Co., Cincinnati.  
Pickering Hardware Co., Cincinnati.  
Queen City Supply Co., Cincinnati.  
Wirthlin & Scallan, Cincinnati.  
Cleveland Tool & Supply Co., Cleveland.  
McIntosh Hardware Corporation, Cleveland.  
W. M. Pattison Supply Co., Cleveland.  
Republic Belting Co., Cleveland.  
Strong, Carlisle & Hammond Company, Cleveland.  
White Tool & Supply Co., Cleveland.  
Geo. Worthington Company, Cleveland.  
Columbus Mill & Mine Supply Co., Columbus.  
Bostwick-Braun Company, Toledo.  
Stambaugh-Thompson Company, Youngstown.  
Patterson Tool & Supply Co., Dayton.

**Pennsylvania.**

W. H. Taylor & Co., Allentown.  
Erie Manufacturing & Supply Co., Erie.  
Hazleton Machinery Supply Co., Hazleton.  
Baird Machinery Co., Pittsburg.  
Frick & Lindsay Company, Pittsburg.  
Hukill-Hunter Company, Pittsburg.  
Machinists' Supply Co., Pittsburg.  
Pittsburg Gage & Supply Co., Pittsburg.  
Pittsburg Supply Co., Pittsburg.  
Somers, Fittler & Todd Company, Pittsburg.

Joseph Woodwell Company, Pittsburg.  
Charles Bond Company, Philadelphia.  
Maddock & Co., Philadelphia.  
Powell, Clouds & Co., Philadelphia.  
W. E. Shipley Machinery Co., Philadelphia.  
Scranton Supply & Machinery Co., Scranton.

**Rhode Island.**

Standard Mill Supply Co., Providence.  
Thomas & Lowe Machinery Co., Providence.

**Utah.**

Salt Lake Hardware Co., Salt Lake City.

**Washington.**

Caldwell Brothers Company, Seattle.  
Hallidie Machinery Co., Seattle.

**Wisconsin.**

Philip Gross Hardware Co., Milwaukee.  
McDowell, Stocker & Co., Milwaukee.  
O. L. Packard Machinery Co., Milwaukee.  
Hoernel Hardware Co., Racine.

**AMERICAN SUPPLY AND MACHINERY MANUFACTURERS' ASSOCIATION.**

Melville W. Mix, president, Dodge Manufacturing Co., Mishawaka, Ind.; Henry D. Sharpe, first vice-president, Brown & Sharpe Manufacturing Co., Providence, R. I.; L. D. May, second vice-president, A. Leschen & Sons Rope Co., St. Louis, Mo.; E. H. Hargrave, third vice-president, the Cincinnati Tool Co., Cincinnati, Ohio; F. D. Mitchell, secretary-treasurer, New York, N. Y., 309 Broadway; Charles F. Aaron, chairman, New York Leather Belting Co., New York city; J. H. Drury, Union Twist Drill Co., Athol, Mass.; J. W. Gardner, Gardner Governor Co., Quincy, Ill.; Henry R. Towne, Yale & Towne Manufacturing Co., New York city; John Trix, American Injector Co., Detroit, Mich., executive committee.  
T. R. Almond Manufacturing Co., Brooklyn, N. Y.  
American Belting Co., Youngstown, Ohio.  
American Injector Co., Detroit, Mich.  
American Iron & Steel Manufacturing Co., Lebanon, Pa.  
American Lace Leather Co., Inc., Richmond, Va.  
American Pulley Co., Philadelphia, Pa.  
American Steam Pump Co., Battle Creek, Mich.  
American Valve & Meter Co., Cincinnati, Ohio.  
Ames Iron Works, Oswego, N. Y.  
Appleton Car Mover Co., Appleton, Wis.  
Atha Tool Co., Newark, N. J.  
E. C. Atkins & Co., Inc., Indianapolis, Ind.  
Baeder, Adamson & Co., Philadelphia, Pa.  
Bay State Tap & Die Co., Mansfield, Mass.  
Bond Foundry & Machine Co., Manheim, Pa.  
Bradford Belting Co., Cincinnati, Ohio.  
Brown-Cochran Company, Lorain, Ohio.  
Brown & Sharpe Manufacturing Co., Providence, R. I.  
Buffalo Forge Co., Buffalo, N. Y.  
S. W. Card Manufacturing Co., Mansfield, Mass.  
J. M. Carpenter Tap & Die Co., Pawtucket, R. I.  
Chain Belt Co., Milwaukee, Wis.  
Chandler & Taylor Company, Indianapolis, Ind.  
Charleston Metallic Packing Co., Charleston, S. C.  
Chase Turbine Manufacturing Co., Orange, Mass.  
A. W. Chesterton & Co., Boston, Mass.  
Cleveland Twist Drill Co., Cleveland, Ohio.  
Cincinnati Rubber Manufacturing Co., Cincinnati, Ohio.  
Cincinnati Tool Co., Cincinnati, Ohio.  
Combination Rubber Manufacturing Co., Bloomfield, N. J.  
Adam Cook's Sons, New York city.  
Crescent Machine Co., Leetonia, Ohio.  
Curtis & Co. Manufacturing Co., St. Louis, Mo.  
John Davis Company, Chicago, Ill.  
Detroit Lubricator Co., Detroit, Mich.  
Detroit Oak Belting Co., Detroit, Mich.  
Diamond Saw and Stamping Works, Buffalo, N. Y.  
Dodge Manufacturing Co., Mishawaka, Ind.  
Duff Manufacturing Co., Pittsburg, Pa.  
Eagle Belting Co., Cincinnati, Ohio.  
Eastern Felt Co., Winchester, Mass.  
Eureka Fire Hose Co., New York city.  
Eureka Packing Co., New York city.  
Fisher Governor Co., Marshalltown, Iowa.  
Stanley G. Flagg & Co., Philadelphia, Pa.  
Forster Pulley Works, Cuba, N. Y.  
Frictionless Metal Co., Chattanooga, Tenn.  
Gandy Belting Co., Baltimore, Md.  
Gardner Governor Co., Quincy, Ill.  
Garland Nut & Rivet Co., Pittsburg, Pa.  
Glacier Metal Co., Richmond, Va.  
Edwin Harrington, Son & Co., Inc., Philadelphia, Pa.

Hart Manufacturing Co., Cleveland, Ohio.  
Hayden-Corbett Chain Co., Columbus, Ohio.  
Hoopes & Townsend Company, Philadelphia, Pa.  
E. F. Houghton & Co., Philadelphia, Pa.  
Hussey-Binns Shovel Co., Pittsburg, Pa.  
Jeffrey Manufacturing Co., Columbus, Ohio.  
Jenkins Bros., New York city.  
Jewell Belting Co., Philadelphia, Pa.  
Kalamazoo Railway Supply Co., Kalamazoo, Mich.  
Kensley & Mattison Company, Ambler, Pa.  
Kelly & Jones Company, Greensburg, Pa.  
Keuffel & Esser Company, New York city.  
Keystone Manufacturing Co., Buffalo, N. Y.  
Knight Manufacturing Co., Canton, Ohio.  
Kuhns Bros., Dayton, Ohio.  
La Belle Iron Works, Steubenville, Ohio.  
A. Leschen & Sons Rope Co., St. Louis, Mo.  
Lidgerwood Manufacturing Co., New York city.  
Jas. H. Link Machinery Co., Williamsport, Pa.  
Lunkenheimer Company, Cincinnati, Ohio.  
Luffin Rule Co., Saginaw, Mich.  
Manufacturers' Belt Hook Co., Chicago, Ill.  
Massachusetts Saw Works, Chicopee, Mass.  
John H. McGowan Company, Cincinnati, Ohio.  
Mechanical Rubber Co., Chicago, Ill.  
Mechanical Rubber Co., Cleveland, Ohio.  
Medart Patent Pulley Co., St. Louis, Mo.  
Moran Flexible Steam Joint Co., Louisville, Ky.  
Mt. Vernon Belting Co., Baltimore, Md.  
National Supply Co., Baltimore, Md.  
New York Belting & Packing Co., New York city.  
New York Leather Belting Co., New York city.  
N. J. Car Spring & Rubber Co., Jersey City, N. J.  
Norristown Magnesia & Asbestos Co., Norristown, Pa.  
W. S. Nott Company, Minneapolis, Minn.  
Nordyke & Marmon Company, Indianapolis, Ind.  
Northampton Emery Wheel Co., Leeds, Mass.  
Ohio Blower Co., Cleveland, Ohio.  
Ohio Valley Pulley Works, Maysville, Ky.  
James Ohlen & Sons Saw Manufacturing Co., Columbus, Ohio.  
Oliver Machinery Co., Grand Rapids, Mich.  
Charles Parker Company, Meriden, Conn.  
Paul Manufacturing Co., Fort Wayne, Ind.  
Peerless Rubber Manufacturing Co., New York city.  
Penberthy Injector Co., Detroit, Mich.  
Pennsylvania Shafting Co., Spring City, Pa.  
Pike Manufacturing Co., Pike, N. H.  
Pittsburg Steam Packing Co., Pittsburg, Pa.  
Wm. Powell Company, Cincinnati, Ohio.  
Reeves Pulley Co., Columbus, Ind.  
Republic Rubber Co., Youngstown, Ohio.  
Rex File & Saw Co., Newcomerstown, Ohio.  
Clement-Restain Company, Philadelphia, Pa.  
Rogers Foundry & Machine Co., Philadelphia, Pa.  
Russell, Burdall & Ward Bolt & Nut Co., Port Chester, N. Y.  
Saginaw Manufacturing Co., Saginaw, Mich.  
Schaeffer & Budenberg Manufacturing Co., New York city.  
H. B. Sherman Manufacturing Co., Battle Creek, Mich.  
Simonds Manufacturing Co., Fitchburg, Mass.  
Sinker-Davis Company, Indianapolis, Ind.



Standard Chain Co., Pittsburg, Pa.  
 Standard Pressed Steel Co., Philadelphia, Pa.  
 L. S. Starrett Company, Athol, Mass.  
 Stephenson Manufacturing Co., Albany, N. Y.  
 Sterling & Skinner Manufacturing Co., Detroit, Mich.  
 Star Corundum Wheel Co., Detroit, Mich.  
 Pennsylvania Steel Pulley Co., Pittsburg, Pa.  
 Noera Manufacturing Co., Waterbury, Conn.  
 Oliver Iron & Steel Co., Pittsburg, Pa.  
 St. Louis Shovel Co., St. Louis, Mo.  
 Trenton Rubber Manufacturing Co., Trenton, N. J.  
 Union Manufacturing Co., New Britain, Conn.  
 Union Twist Drill Co., Athol, Mass.  
 United States Graphite Co., Saginaw, Mich.  
 Upson Nut Co., Cleveland, Ohio.  
 Voorhees Rubber Manufacturing Co., Jersey City, N. J.  
 Warren Lubricant Co., Warren, Pa.  
 Wells Brothers Company, Greenfield, Mass.  
 Western Block Co., Lockport, N. Y.  
 Whitman & Barnes Manufacturing Co., Chicago, Ill.  
 D. T. Williams Valve Co., Cincinnati, Ohio.  
 T. B. Woods' Sons Company, Chambersburg, Pa.  
 Yale & Towne Manufacturing Co., New York city.

### IRON MARKET DRIFTING.

#### Unsettled Condition in the Birmingham District.

[Special Cor. Manufacturers' Record.]  
 Birmingham, Ala., May 11.

An unsettled condition of the market prevailed all during the past week, and there was an indisposition in some quarters to publish transactions. The figures obtained and herewith appended plainly show that as far as prices are concerned there were some weak spots. The market all along the line was a drifting one, and vainly tried to hold its own without success. In the way of analysis iron, prices were as good as those obtained the preceding week. But the regular grades failed to maintain themselves, and in not infrequent cases took a downward slide. The majority of the transactions were of very moderate volume, with once in a while a respectable order of moderate volume sandwiched in between. The sale of one lot of 10,000 tons of various grades was obtained indirectly, but none of the particulars except delivery, which was principally for May and June. No effort on the part of your correspondent to obtain the price was successful. Nor could it be said of the buyer that he was more than suspected. A few lots were reported of 1000 tons each, but no particulars were obtainable. There were sales of several lots on the basis of \$11.50 for No. 2 foundry, with some at \$11.75, and there were some infrequent sales at \$12 for No. 2 foundry. But just what was sold at these prices cannot be ascertained, owing to suppression of sales.

Analysis iron was in fair request, and there was very little trouble in obtaining the sellers' price. It is quoted all the way from \$13 to \$14, with sales to substantiate the quotations, the varying prices depending upon the amount of silicon the iron carried. There were sales of No. 3 foundry at \$11.25, and of No. 4 foundry at \$10.75, with some No. 2 foundry at \$11.75, but the sales were of only moderate amounts. The sale of 750 tons by the Alabama Consolidated Company was of three grades, and consisted of 100 tons of No. 1 foundry, 400 tons of No. 2 foundry, 300 tons of No. 3 foundry and 50 tons of

high silicon. This particular make was desired because of its qualities. After the iron has been accepted by the Government inspector it will be shipped to the Isthmus of Panama via Mobile. The price obtained has not been divulged.

Indications point to the purchase of some iron for local account, but definite information is not available as to the particulars. It is hard to say with directness about any increase of stocks in yards, but if there is any increase it cannot be of any moment, for one of the most prominent producers announced that his company had sold so far this month more than its make. Some of the others have about sold their make, even on the irregular demand that has characterized the market. The reported prices at which sales have been made justify the statement that the market price ranges from \$11.50 to \$12. There were a few sales above the top, and there were a few sales below the lowest prices given, but the range of prices was about as stated. Information from competitive districts was to the effect that Birmingham was selling at basis of \$10.50 for No. 2 foundry. The statement was a reiteration of a similar charge of the preceding week, and it was disposed of by a leading official of the interest named as the seller with the declaration that his company had not only not sold iron at the price stated, but that since the charges had been fulminated he had refused orders aggregating fully 100,000 tons at the stated price. And he clinched his assertion with the remark that it would be poor judgment on his part to sell at \$10 to \$10.50 when he had been selling the make of his company at current values. The persistence of these rumors in the face of such positive and strenuous denials is not creditable to their propagators. The air has been loaded with them. They meet you at every turn. They are injurious and they are malevolent.

The various pipe companies are full of iniquities, and a good many orders for moderate amounts are being landed. But a large majority of the orders secured are for only moderate amounts. The St. Louis order or contract, amounting to nearly 5000 tons, was secured by one of the local companies, and the near future gives promise of increased business. The quotations as given are to be taken as approximations only, as requirements now cut quite a figure in the submission of prices. There has been and there is now a keen competition between the rival interests for the business offering, and the profits to the successful bidder are rather slim. Quotations are for four and six-inch pipe \$21, and for 8, 10 and 12-inch \$20. For gaspipe add \$1 extra.

The scrap-iron market is reported unchanged at previous quotations, which, as rendered by Weller & Co., are as follows:

Old iron rails, \$14.  
 Old iron axles, \$14.  
 Old steel axles, \$14.  
 No. 1 railroad wrought, \$13.  
 No. 2 railroad wrought, \$11.  
 No. 1 country wrought, \$11.50.  
 No. 2 country wrought, \$11.  
 Old car wheels, \$12.  
 No. 1 malleable, \$11.  
 Machinery castings, \$9.50 to \$10.  
 Wrought-iron pipes and flues, \$10.  
 No. 1 steel, \$10 to \$10.50.  
 Stove plate, \$9.  
 Cast borings, \$6.

President Crawford of the Tennessee Iron, Coal & Railroad Co. announces that the open-hearth department of the steel plant, as well as the rail mill, will resume operations on the 15th of June, after which time it is expected they will be operated continuously the remainder of the year. Two blast furnaces at Ensley and one at Bessemer will continue to

be operated. The rolling mills at Bessemer, it is anticipated, will be put in operation at the same time as the departments above mentioned. They will be operated then as long as the business warrants. The rail mill as now improved has a capacity of 600,000 tons per year, and the open-hearth mill will have to grow up to it. Every test to prove the efficiency of the improved mill has been satisfactorily met, and those in charge can well say the work has been well done.

A telegram from Gadsden announces that the Gulf Portland Cement Co., composed mainly of Philadelphia capitalists and manufacturers, announces its intention to begin without delay the erection of a cement plant at Ragland, in St. Clair county, and on the line of the Seaboard Air Line Railroad. The estimated cost of the plant is \$1,500,000. According to the plans, the plant is to be in operation before the end of the year.

The Sheffield Cast Iron and Pipe Co. has given a mortgage for \$300,000 to the Sheffield Trust Co. to secure a bond issue, the proceeds of which will be used in betterments and the installation of more up-to-date machinery, which will make its capacity very perceptibly more.

Business conditions are improving so slowly that they are hardly perceptible. But there can be no question that they are better. The Southern Railway claims that business conditions have improved on its line since January. One day the past week this road handled 15 trains in one day through Ensley, with 45 cars of assorted merchandise besides. Improvements are in progress all over the district, and to outside appearances the hard times have gone. In a measure this is so, and while we can't say we are out of the woods, every day we are making time to smoother roads and more comfortable surroundings. President Harahan of the Illinois Central road wires that his road will commence the regular schedule of trains on his road between Chicago and Birmingham on the 30th day of this month, when the event will be celebrated with appropriate ceremonies and appropriate enthusiasm. J. M. K.

#### A 15-Story Building for Birmingham

[Special Dispatch to Manufacturers' Record.]  
 Birmingham, Ala., May 12.

It is authoritatively announced today that the Empire Construction Co., organized through the efforts mainly of Robert Jemison, will erect a 15-story structure, to be known as the Empire Building, on the corner of First avenue and 20th street, on a site 50x100 feet, at an estimated cost of \$350,000.

Warren & Weldon, with offices in the Title Guarantee Building, are the architects, and with Carpenter & Blair of New York as associate architects, are busy at work on the plans, which are under contract to be ready and completed for inspection and acceptance within 40 days. The building now under lease occupying the site will not be vacated before next October.

As soon as the plans of the architects are approved bids will be asked on the work and material will be gathered for it, so that no time will be lost in commencing operations as soon as the premises are vacated. The first three stories will be finished with stone, and above that the building will be of brick, with terra-cotta. There will be seven different sizes and styles of offices, and there will be 10 rooms to the floor. Every modern appliance will be installed, and it is gossip that a prominent bank will be located on the ground floor. A roof garden is projected for the building, and every effort will be made to surpass anything here in the line of skyscrapers. J. M. K.

### Steam Engineers.

In connection with the twenty-second annual convention of the Supreme Council of the American Order of Steam Engineers, which will be held in Baltimore, Md., June 8-11, an exhibition of steam engineering supplies will be held under the auspices of a local committee of the American Supply Men's Association. This arrangement for holding the exhibition has been followed for several years, and it has been found to give great satisfaction. The exhibition will include a display of everything of interest to steam engineers in their work, and it affords them an opportunity to view at first hand the many improvements that are made from year to year in such supplies, as well as to keep them posted on all new devices. For the convenience and information of exhibitors the hall in which the exhibition will be held has been plotted, showing the exact size and location of each booth. These plots are being sent out to all possible exhibitors, and spaces will be allotted in the order that the applications are received by the secretary of the committee.

The Baltimore committee which will have charge of the exhibition this year includes Messrs. Frank A. Knowles, Maryland Asbestos Co., chairman; N. S. Kenny, the Philip Carey Company, secretary and treasurer; J. F. Boiland, Garlock Packing Co.; Henry A. Kries, the Crook-Kries Company, and D. J. P. Murray, the Anchor Packing Co.

The American Order of Steam Engineers is a national body, and includes in its membership over 12,000, and it has for its objects the promotion of a more thorough knowledge of theoretical and practical steam engineering among its members, as well as acting along the lines of a beneficial organization. The principal officers of the order are: Chief engineer, A. J. Diedrich, Baltimore, Md.; first assistant engineer, J. T. Harris, Milwaukee, Wis.; recording engineer, E. H. Naylor, North Abington, Mass.; corresponding engineer, Frederick Markoe, Philadelphia, Pa.; treasurer engineer, W. J. Gifford, Philadelphia, Pa. It is expected about 200 members of the Supreme Council will be in attendance.

#### A Glass-Bottle Plant.

The Travis Glass Co., H. E. Travis, managing officer, Clarksburg, W. Va., will build a plant for manufacturing glass milk jars, the daily production to be 20 tons of finished goods. About \$20,000 will be expended for building furnaces, erecting 90x300-foot corrugated-iron roof and side building, etc., and about \$15,000 for machinery, molds, etc. The company will want machine-shop equipment, electric-driven; fan or blower, and cross-cut and rip saws for box shop, electric-driven.

At the second annual meeting next Tuesday at Hamlet, N. C., of the Country Bankers' Association addresses will be made by Messrs. Henry A. Page, president of the Bank of Aberdeen, N. C., and W. F. Stevenson, president of the Merchants and Farmers' Bank of Cheraw, S. C. The officers of the association are Messrs. L. S. Covington, president; W. L. Marshall, vice-president, and Hinton James, secretary and treasurer.

In addition to the White House conference on conservation of natural resources, Washington is entertaining this week the National Drainage Congress and the convention of the American Water-Works Association.

It is estimated that Frederick county, Virginia, will market this year 150,000 barrels of apples, valued at \$300,000.

# CURRENT EVENTS AS VIEWED BY OTHERS

## THE CRY OF THE COUNTRY.

[Memphis Commercial-Appeal.]

"Let us alone to do business."

These words are across the cover of the MANUFACTURERS' RECORD of Baltimore, that journal describing them as "the cry of the country."

"Let us alone to do business."

The cry is an appeal to the demagogues and pretenders in politics. It wells up from all the avenues of trade, and is a mighty protest against that most pernicious of all pests—the unwise and unskilled meddler in the affairs of others. Legislative "butterers in" upon affairs concerning which they have no more knowledge than a woodman has of the high sea; reformers, earnest enough, perhaps, meaning well, but seeing only one side of the question and shutting their minds to all further knowledge; crafty politicians playing upon the prejudices of men of their own personal aggrandizement and pretenders hiding selfishness behind the cloak of virtue—all have done their worst to cripple and assassinate the industries of the nation.

The South especially has suffered from these factors in politics, and it is high time for the sensible business man of this section to come to the front and take at least the lawmaking power from the hands of those who have brought us to this condition.

"It is time for the wise men who own property to take charge of our Southern States," says a writer to the MANUFACTURERS' RECORD. "It has run far enough in a careless way. Our legislators should be chosen from our big-minded, successful business men and drive out the demagogue and boy members who have not borne the burden of building up the industries of the South. These men now in public office are tearing down what we have made, and they are not able to restore what they have nearly ruined. It takes skill to make a watch, but a fool or a child will take it to pieces to see what makes the wheels go around, and the watch is ruined. So it is with the young generation. They mean well, but it hurts just the same."

This is aptly put, and should have influence with the better minds of the South. Let us get rid of the boy legislator; let us get rid of the man who has capacity only for good-fellowship; let us get rid of the pretender and the demagogue. If the South wants to save itself from the folly of crippling itself by retarding its development, its people, those who made the "watch," must assert themselves or else the delicate instrument will be ruined beyond repair.

## CEMENT HOUSES.

[Cement Age.]

No recent statement has had the world-wide publicity given to that of Mr. Edison when he declared that he would build a cement house in a few days at a cost of \$1000. The fact that it remained for months the subject of discussion in all parts of the world disclosed the deep interest felt in this problem of house-building. Mr. Edison's conviction as to the utility of concrete was based upon what he had observed concerning its plastic nature, and during the period he was experimenting with the view to reducing costs and time to the very minimum, others have been well satisfied to accept concrete on the terms established in actual building practice. The result has been a vast increase in the number of concrete houses in every section of the country in which cement is available. In this day we hear not only

of block houses and monolithic mansions, but of "fireproof towns," the latter large enterprises or operations following recognition of the durable and fireproof qualities of concrete. But it is not merely in the increased number of concrete houses that progress has been shown. There has been a corresponding development in the direction of pleasing designs and improved structural methods. Fortunately, this has not been accompanied by an increase in cost. On the contrary, it is claimed by some that it is possible to utilize concrete in satisfactory and durable construction which will show considerable saving over wood, brick or stone.

## OPTIMISM IN STEEL REPORT.

[Louisville Courier-Journal.]

The report of the United States Steel Corporation for the quarter ending March 31, 1908, indicates that the business of that huge concern is swinging back toward prosperity. The total earnings for the quarter over expenses are \$18,229,005. Compared with the earnings of the preceding quarter, which were \$32,500,000, there is shown a decrease of about \$14,000,000. Nevertheless, these earnings make possible a dividend of 1 1/4% on the preferred stock and one-half of 1 per cent. on the common, which is at the rate of 7 per cent. per annum on the preferred and 2 on the common.

To discern the rosy indications which the earnings hold, however, you must split the quarter into months and analyze them with the month as the unit. To begin with, October, with earnings of \$17,000,000, made the highest record in the history of the Corporation. The lowest point in earnings was touched in December, when the figure was \$5,039,531. In January they moved upward. For January the earnings were \$5,052,743, a gain over December of \$18,212. February did better. For that month the earnings were \$5,709,425, a gain of \$656,685 over January. March showed a greater improvement still, when the earnings were \$7,466,834, an increase of \$1,757,406 over February.

Steel is frequently referred to as "the barometer of trade." If that be true—and there are few, if any, to doubt so firmly established an axiom—things are looking up. If the growth in earnings of this great corporation continues steadily it will not be long before its business will be normal. Conditions which make possible the restoration of its business to normal necessarily must make possible the restoration of all other business; in fact, it is hardly possible for the Steel Corporation's business to continue its growth unless the buying power of the country be increased by the prosperity of general business.

The gain already made by the Corporation may be pointed to as an effect rather than a cause. It is the effect of a betterment of conditions in general business, which has developed the buying power of industries which use steel.

The report, therefore, may be held emphatically to be a proper source of optimism.

## RECLAMATION BY DRAINAGE.

[Troy Times.]

In line with the newly-developed efforts for the conservation of the country's natural resources is a movement which is assuming important dimensions in certain localities. While great profit and many benefits accrue from the irrigation schemes that are taking form in the West and are providing thousands of acres of land for

agricultural purposes, there are sections where reclamation of another sort is going on. The South especially has a great deal of swamp land, the richest that can be found anywhere and the surest reliance for big and remunerative crops if proper conditions can be assured. Some of this land has been drained and is under cultivation, and the great possibilities in that direction are beginning to be realized.

The MANUFACTURERS' RECORD of Baltimore, which gives much attention to economic and industrial matters, publishes some highly interesting correspondence bearing upon this subject. It is from New Orleans and a hint as to the magnitude of the work that may be done in that immediate vicinity is furnished in the following statement:

"The activity in swamp-land reclamation or, more properly speaking, the draining of wet prairie lands, which has occurred in this vicinity since the first of the present year has drawn the attention of machinery builders to this new field for their enterprise, and a number of the builders of dredges and ditchers have been or are on the ground to take advantage of the possibilities the situation presents. That the field is a much broader one than is yet comprehended, however, would seem to be indicated by an estimate I have heard that all of \$12,000,000 worth of various kinds of machinery and implements would be required to reclaim and equip for cultivation the million or more acres of wet lands in this immediate region if done within the next 15 or 20 years' time."

The letter continues at much length, and furnishes many details to show what is essential to the success of reclamation efforts. The correspondent adds that several hundred thousand acres of Louisiana wet prairie lands have lately passed into the hands of parties and corporations that propose development as rapidly as possible, and there is likely to be a lively demand for the requisite machinery.

All this means the utilization of now valueless lands and a corresponding addition to the wealth and prosperity of the nation, and this form of reclamation should be encouraged accordingly.

## IN FEDERAL PROVINCE.

[Engineering News.]

Assume, for the sake of argument, that the reservoir plan of river control is demonstrated to be practicable. Assume that by spending, say, \$200,000,000 in building reservoirs on the headwaters of the Allegheny and Monongahela and a dozen other chief tributaries of the Ohio, floods in that river can be kept below the danger line, low-water depths can be increased so that navigation will be stimulated and vast expenditures in dredging and slackwater navigation systems will be rendered unnecessary, while the increased flow in dry weather will improve the quality of the potable water supply in all the cities along the river. Assume, also, that these reservoirs create a water-power amounting to 3,000,000 horse-power, and capable of yielding an annual income when developed of \$50,000,000. The use of this power will save from consumption some 15,000,000 tons of coal per annum, and is, therefore, an important means of conserving our rapidly diminishing fuel supplies.

Assume that because of all these considerations, the enterprise is judged one that should be undertaken, the question arises who should or could undertake it and carry it out? Could the cities of

Pittsburg and Allegheny, which have been the greatest sufferers from flood damage, undertake the work of reservoir construction on the Allegheny and Monongahela? In order to do it they would have to build reservoirs not only in Pennsylvania, but in New York, Maryland and West Virginia. Is it not clear that these cities, and likewise the State of Pennsylvania itself, is impotent to carry out this work of river control? Its power stops at the State line. That private enterprise would be powerless to conduct the work is evident at a glance. There remains, then, only the Federal Government.

## FARM AND FACTORY.

[Charlotte Chronicle.]

The price of cotton has increased with the growth of cotton mills and spindles. Every family drawn from the cotton farm into the cotton mills has decreased the competition in cotton production and thereby helped to increase the price of cotton. Every family so drawn from the farm to the factory has increased the markets for perishable farm products, and those who produce and furnish these make another element who cease to compete or diminish their competition in cotton production. The increase of cotton consumption which the new mills make all go to to make cotton higher in price.

Any idea that the interests of the farm and factory are in the slightest way at variance is a gross error. The prosperity of the mills add to the prosperity of the farmer. When the mill business is in a depressed condition the price of cotton is bound to sag. Neither the mill nor farm may separately prosper. The prosperous farmer buys more cotton goods, and this adds to the prosperity of the factory. The farm and factory prosper together, or not at all.

## FOR BUSINESS REVIVAL.

[Wall Street Summary.]

The impression should not be conveyed that we can reconstruct things as of old in a brief interval. The earnest contribution of every citizen is necessary for a business revival, whether of thought or effort, and this must be sincere and continuous. With cheerfulness and patience guiding us we can measurably improve our present status; only the volatile and the visionary look for record-breaking industrial and commercial returns immediately. The prosperity that passed from us was the slow accumulation of many years of effort; it cannot be summoned or re-established at will. It is now behind us, and looking backward will not aid us. We must go forward and build anew with courage and determination, and these the sunshine evangelists may inspire if their presentation of existing conditions to the people is free from exaggeration or misrepresentation. Truth is the only basis for faith.

The Chamber of Commerce of Wilmington, N. C., has elected Messrs. J. A. Taylor, president; S. P. McNair, vice-president; John S. McEachern, Sam Bear, U. M. Robinson, R. A. Parsley and William E. Worth, executive committee.

The Lunenburg County Board of Trade has elected Fletcher W. Manson president and D. T. Kennedy secretary. The board has decided to raise \$25,000 for the construction of tobacco warehouses and prizees at Kenbridge, with the idea of making this town the principal tobacco market of the county.



## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

### American Cotton Manufacturers.

At the annual meeting next week at Richmond, Va., of the American Cotton Manufacturers' Association the program will include, in addition to the annual address of President S. B. Tanner, addresses of welcome by Governor Claude A. Swanson and Mayor Carlton McCarthy, and a reply by Mr. Arthur H. Lowe of Fitchburg, Mass.; addresses on "Inland Waterways," by Hon. John H. Small of North Carolina; "Cotton Goods in the Orient," by John Foord of New York; "Fine Cotton Spinning in the United States," by Arnold B. Sanford of Boston, Mass.; "The Advantages and Disadvantages of Bleaching and Finishing in the South," by John W. Arrington of Greenville, S. C.; "Sizing Yarns," by E. W. Hitchcock of Boston, Mass.; "Modern Methods of Merchandising," by L. R. Latshaw of Philadelphia, Pa.; "The Tariff and the Currency," by D. A. Tompkins of Charlotte, N. C.; "The Oil Storage Problem," by S. B. Bechtel of Fort Wayne, Ind.; "A Misnomer," by W. H. Harris of Atlanta, Ga.; "Textile Schools," by Thomas Nelson of Raleigh, N. C., and "What the South Has to Gain from Yarn Testing," by R. B. Hoguet. It is expected that at the last night session an address will be made by Governor John A. Johnson of Minnesota.

The officers of the association are Messrs. S. B. Tanner, Carolee, N. C., president; T. H. Renie, Graniteville, S. C., vice-president; C. B. Bryant, Charlotte, N. C., secretary and treasurer, and T. Ashby Blithe, Philadelphia, Pa., chairman; L. W. Parker, Greenville, S. C.; F. A. Flather, Boston, Mass.; E. A. Smith, Charlotte, N. C.; J. J. White, Jr., McComb City, Miss.; Chas. H. Gorton, Aragon, Ga.; Leonard Paulson, New York; D. Y. Cooper, Henderson, N. C.; Charles H. Fish, Dover, N. H.; R. S. Reinhardt, Lincolnton, N. C.; W. T. Lang, Knoxville, Tenn.; David Clark, Jonesboro, N. C.; E. A. Smyth, Greenville, S. C.; M. M. McColl, Opelika, Ala., and E. Chappell, board of governors.

### The Carolina Mills.

The Carolina Mills' increase of capital from \$100,000 to \$200,000, referred to last week, will cover the company's addition, which has just been completed. This enlargement about doubles the company's previous plant at Greenville, S. C., giving it a total of 12,000 spindles and 356 looms for manufacturing print cloths and medium goods. Details of the enlargement were stated in the MANUFACTURERS' RECORD some time ago.

### To Increase Capital.

The Anderson (S. C.) Cotton Mills will hold a meeting of stockholders on June 9 to consider increasing capital stock from \$600,000 to \$800,000. This company operates 70,000 spindles and 1864 looms on print-cloth production.

### Wants Denims and Drills.

The Fulton Overall Manufacturing Co. of Fulton, Ky., wants to buy denims and drills for manufacturing overalls.

The Deibert & Wilson Textile Co.'s damask and tablecloth mill at Elkton,

Md., was destroyed by fire last week, the loss being \$50,000. It is reported the company will rebuild.

### Textile Notes.

The Chamber of Commerce, Waco, Texas, is negotiating for the establishment of a woolen mill in that city.

It is reported the Savannah (Ga.) Cotton Mills has awarded contract for the knitting machinery to be installed in its 40x150-foot addition reported previously as to be erected. It is understood the company will eventually install several hundred knitting machines.

## COTTONSEED

### Cottonseed Crushers.

It is expected that commercial organizations of Memphis, New Orleans, Galveston, Savannah, Atlanta, Columbia, Dallas, Chicago and New York will be represented at the convention next week at Louisville, Ky., of the Interstate Cottonseed Crushers' Association. The local committee of arrangements for the convention consists of Messrs. W. W. Hite, president Board of Trade; R. S. Brown, president Commercial Club; W. J. Baird, president Merchants and Manufacturers' Association; H. J. Streng, president Retail Merchants' Association; J. J. Caffrey, president Louisville Cotton Oil Co.; F. W. McKee, vice-president Kentucky Refining Co.; Charles Schimpeler, president Victor Cotton Oil Co.

## FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

### Rubber Goods, Edged Tools, Builders' Hardware.

Boswell & Co., Wynyard Building, 40 Carrington street, Sydney, New South Wales, Australia:

"We are desirous of securing the representation of first-class manufacturers, particularly in rubber footwear, edged tools and builders' hardware. It has always been our object to confine ourselves to a limited number of agencies, so that we can devote our personal attention to same. We travel the several States at least twice a year, and have a good connection with the best houses throughout Australia and New Zealand."

### Wanted for Germany.

E. Arnold, Lauterenstrasse 16, Mainz, Germany:

"Could you give my name to manufacturers of the under-mentioned articles desirous of being represented in this country. The articles are lard, evaporated fruits, cotton oil, beef tallow, oleomargarine, acetate lime, phosphate and casing for sausage. Such articles as the above are imported into this country in tons."

### Saponified Olein.

Lorenzo Pucci & Co. via Medina 47, Naples, Italy:

"The commodity which interests us most at present is saponified olein, showing 90 to 100 per cent. of saponification, for making soap soft, chestnut color. Could you possibly do me the favor of having samples of such saponified olein sent us promptly, with prices c. i. f. by some of your manufacturers?"

### Plans Wanted for Church.

A. G. Cook, chairman of committee, Amite City, La., wants plans and specifications for a frame church costing not less than \$5000.

## MINING

### Georgia Manganese.

A preliminary report on the manganese deposits of Georgia by Thomas L. Watson, Ph.D., formerly assistant State Geologist, has been published in book form as bulletin No. 14 of the Geological Survey of Georgia. For many years Georgia has been one of the three principal manganese ore producing States of the Union, the other two being Virginia and Arkansas. The first shipment from Georgia was in 1866, when the production was 550 tons. This was all mined in the Cartersville district in Bartow county, which yields nine-tenths of the ore mined in the State. The manganese ores are entirely limited to the northern part of the State, and are distributed irregularly over parts of two geologically different areas, the Paleozoic group and the Crystalline area, of which the commercially important deposits are wholly limited to certain areas in the Paleozoic group. A few tons of ore have been shipped from widely-separated counties in the Crystalline area, but no workable deposits of the ore are known to occur in this area.

### Buys Kaolin Mine.

Dispatches from Aiken, S. C., announce the sale of the Peerless Kaolin Co.'s kaolin mine, located about two miles from Langley, S. C., to Western capitalists who are largely interested in the American China Co. of Toronto, Ohio. The property is said to contain about 160 acres, with a deposit of white kaolin 15 feet in thickness and of fine quality. Under this there is said to be a good stratum of colored kaolin, and on top of it a stratum of wand-clay, which is adapted to the manufacture of fire-brick. It is understood that the purchasers will manufacture fire-brick, tiling, piping and possibly chinaware. Mr. J. K. Lamar of North Augusta, S. C., conducted negotiations for the sale of the property, the deal involving about \$30,000.

### American Sulphur & Oil Co.

The American Sulphur & Oil Co. has been organized with a capital stock of \$2,000,000 for the development of sulphur deposits in Liberty county, Texas. It plans to install an initial equipment for the production of 1000 tons daily, melting the sulphur under ground by the use of superheated steam and pumping the melted sulphur to the surface. When drill hole is completed consideration will be given to specifications for machinery. Company's officers are: President, John W. Harrison, Third National Bank Building, St. Louis, Mo.; treasurer, William Einstein of St. Louis, and superintendent, Dr. A. L. Lyons of Liberty, Texas.

### New River-Kanawha.

Coal loading in the New River and Kanawha fields for April shows an aggregate decrease of about 170,000 tons as compared with the loading for March. The total loading in the two districts amounted to 659,035 tons, of which 388,240 tons were loaded in the New River field and 270,795 tons in the Kanawha field. Out of a total of 8151 cars loaded in the New River field, 5535 cars were shipped to tide-water, while tidewater shipments from the Kanawha field amounted to only about 1600 tons. Shipments of coke amounted to 425 cars from the New River field and 4500 tons from the Kanawha field.

### Mining Notes.

Mr. Aubrey G. Bailey has been appointed agent at Norfolk, Va., for Castner, Curran & Bullitt, Arcade Building, Philadelphia, Pa., succeeding C. M. Barnett, who recently resigned to become president and general manager of the Chesapeake & Ohio Coal & Coke Co., with offices in New York city.

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Messrs. E. P. and W. W. Mucklow, C. W. Morton and R. H. Richardson of Charleston, W. Va., and H. F. Hank of St. Albans, W. Va., have incorporated the Raven Collieries of Charleston with a capital stock of \$200,000. The company will operate in the Jefferson district of Nicholas county, West Virginia.

## PHOSPHATES

### Will Erect Washer System.

Messrs. O. L. Dortch, general manager, and H. D. Ruhm, chief engineer, of the Independent Phosphate Co. of Columbia, Tenn., are reported to have inspected the washer systems used in the land pebble district of Florida and the Birmingham mineral district, with a view to embodying the general features used in these systems in plants which their company will erect at Columbia. It is announced that the Independent Phosphate Co. will erect one, and possibly three, large plants, with capacities of 50,000 tons of phosphate rock per year, the plants to cost about \$10,000 each.

### Opens Rich Deposit District.

A dispatch from Columbia, Tenn., states that Messrs. J. E. Rodas & Co. of Knoxville, Tenn., contractors for the Swan Creek Valley Railroad, an extension of the Louisville & Nashville Railroad from Mt. Pleasant to Mayfield, have finished construction work, thus giving an outlet to the phosphate and mining interests of Lewis county and sections between Lewis and Mt. Pleasant. Among the phosphate properties which the road opens up are the Hughes property, the Blue Bone property, Swan Creek Mining Co.'s property and others.

Messrs. J. M. Lang & Co. of Savannah, Ga., report shipments of phosphate rock through the port of Savannah during April amounting to 11,178 tons. Cargoes were shipped to England, Germany and the Netherlands.

### Colonists in Carolina.

A recent issue of the *Charlotte Daily Observer* contained an elaborate three-page article dealing with colonization work of the Carolina Trucking Development Co. in North Carolina. This organization, in which Hugh MacRae of Wilmington, N. C., is the moving spirit, has successfully planted five separate colonies and has a sixth in course of formation. They consist of Artesia, an English and American colony; Newberlin, a German colony; St. Helena, a North Italian colony; Castle Haynes, a mixed colony; Marathon, a Polish colony, and Maraco, in course of development. They include in all about 600 farmers, and cover about 100,000 acres. The soil is especially suited to truck farming, and the settlers are obtaining the best results from their efforts. Moreover, the company maintains a demonstration farm, where experiments are conducted in the raising of new vegetables and where the settlers are instructed in modern methods pertaining to the industry.

### Iron for Panama.

The Alabama Consolidated received an award from the Government yesterday for 750 tons of its high-grade "Clifton" brand, to be used in Panama. The contract was open to competitive bids, and the officials of the Alabama Consolidated were naturally much pleased at "landing" the contract. The Government will send an inspector to the company's plant at Ironaton, where the iron is made. He will make the usual tests and superintend the shipping. The iron will be sent to Mobile and will be transported by ship from that port to Panama.—*Birmingham Age-Herald*.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### OKLAHOMA RAILROADS.

#### A Number of New Plans Chartered and Old Ones Pushing Work.

[Special Cor. Manufacturers' Record.]  
Oklahoma City, Okla., May 11.

Railroad building in Oklahoma may have been retarded by the panic and the overtold reports of proposed radical corporation legislation, but the year thus far is not behind its recent predecessors in the projection of new lines and not greatly behind in actual building. Between 10 and 15 railroad companies have been incorporated under Statehood, among them a number of interurban companies; in fact, the interurbans are leading.

Several miles of the proposed road from Coalgate to Lawton have been completed, and practically all of the right of way has been procured. The latest announcement from the company, indirectly, is that Scullen is to be made a division point and that a roundhouse is being planned.

J. D. Connolly of Titusville, Pa., who is president of a company that proposes to install an electric system at Ardmore, recently went over the field and announced that within the next 18 months the system will be in operation, together with connecting interurban lines. Mr. Connolly was accompanied by E. A. Rea of Corydon, Iowa, and the two men are jointly interested in the Muskogee and Shawnee systems.

It is announced that the projected line from Englewood, Kans., to Des Moines, N. M., across Northwestern Oklahoma, will be completed this summer. Officers of the road have given out the information that Hurley, Okla., will probably be a division point.

Surveyors for a company that proposes a line from Omaha, Neb., to the Gulf are in central Oklahoma making a temporary survey. The survey made in Hughes county crosses the Missouri, Oklahoma & Gulf Railroad at Lamar, and will intersect the Fort Smith & Western in that vicinity.

The power-house for the interurban line between Bartlesville and Dewey will be finished this week. The line will be complete and in operation by June 15. All the equipment, including cars, has been ordered and the track is built to the Caney river out of Bartlesville.

The Wichita Falls & Southern, which is building a line across the Big Pasture, in Southwest Oklahoma, from Wichita Falls, Texas, to Lawton, is making a survey east of the coal fields. Cars will be operating between Wichita Falls and Lawton by fall. This company has recently built a road from Wichita Falls to Frederick, and the Lawton line diverges near Randlett.

The Yankton Southern is another new trunk-line project that has placed Oklahoma on its proposed line. Surveys have been made through Atoka county, in the eastern part of the State, and the surveyors are now in Texas. The line is projected to the Gulf.

Bonuses have been raised by several towns between Chickasha and Sulphur on the proposed interurban line. Grading is in progress near Pauls Valley. The company, headed locally by Scott Jones of Chickasha, proposes to dam the Washita river and form a reservoir for power purposes.

Shawnee is preparing to sell \$200,000 of bonds to build an interurban line to Checotah. The representative citizens of that city, headed by Sidney J. Roy, secretary of the Chamber of Commerce, have

several other railroad propositions on foot and expect them to materialize within a few months.

Sapulpa's street-railway system was completed recently, and cars are in operation. Some interurban lines are proposed by the company.

The Missouri, Oklahoma & Gulf, which has built a short line to Muskogee, has secured contracts as far south in Oklahoma as Durant, and the road will be built in that direction as rapidly as possible.

### BIG ELECTRIC SCHEME.

#### Plans for a Bridge Over the Ohio and Extensive Connections by Trolley.

The incorporation of the Parkersburg Bridge Co., according to a report from Wheeling, W. Va., means that several electric railways will be connected up, and it will be possible to travel by trolley from Pittsburg, Pa., via Wheeling and Parkersburg, W. Va., into Ohio as far as Columbus, and ultimately to Cincinnati. The bridge company was organized at East Liverpool, Ohio, by Joseph G. Lee, Samuel C. Williams and Jason H. Brooks of East Liverpool, Ohio, and James Newell and Charles Newell of Newell, W. Va. The capital is \$400,000. The bridge will extend from Parkersburg over to Belpre, Ohio, and plans for it are reported to have been made by E. K. Morris of Pittsburg, Pa. As soon as the Government grants authority to build over the Ohio the bridge is to be constructed. The plan, it is said, also contemplates securing control of several important electric railways in Ohio to make an unbroken line from Parkersburg to Columbus.

On the West Virginia side of the Ohio river there is an electric line from Parkersburg to Williamstown, 13 miles, but a connection will have to be built from the latter point to Friendly, W. Va., where the Parkersburg & Ohio Valley Traction Co. has a line running to Sistersville, whence the Wetzel & Tyler Electric Railway runs to Steelton, W. Va. Between this point and Moundsville, W. Va., 25 miles of line will have to be built, but there are electric railways from Moundsville to Wheeling, Wellsburg, Follansbee, Steubenville and Wellsville to East Liverpool, Ohio, whence there is a line through to Pittsburg.

By building the necessary links it will be easy to carry out the plan for long distance electric railway service. About five miles of grade has already been built between Friendly and Williamstown, and it is said that steps will be taken immediately to complete this and also the gap between Moundsville and Steelton.

### Oakland to Swallow Falls.

Mr. H. P. Tasker, general manager of the Youghiogheny Light & Power Co., Oakland, Md., informs the MANUFACTURERS' RECORD that the charter of the company secures to it from 10,000 to 15,000 horse-power at a point six miles north of Oakland without any expense for dams. It is also proposed to build a standard-gauge electric railroad six miles long from Oakland to Swallow Falls, Md., which will develop a dozen coal mines along the route, besides immense deposits of superior fire-clay, kaolin, glass sand, etc., near Swallow Falls. He further says that Baltimore & Ohio officials will supply the rails and rolling stock for this connecting link of railroad if the citizens of Oakland, Mountain Lake Park, Deer Park and Pittsburg will build the line.

When this road is supplied electric branches will be necessary thus: One of about 30 miles to Uniontown, Pa., with a lateral branch of about 12 miles to Kingwood. These branches will run through and develop more than 60,000 acres of Connellsville coking coal which are now

optioned. Another branch of 14 miles will connect with the standard-gauge railroad of the Jennings Lumber & Coal Co. and develop scores of coal mines all along its line via Negro mountain and Meadow mountain, terminating at Heyersdale, Pa. The recent reports that the Kendall Lumber Co. would widen the gauge of its narrow-gauge railroad up the Youghiogheny river to Swallow Falls are premature.

The other officers of the company are A. C. Sturgiss, president; Truman West, vice-president; P. A. Chisholm, second vice-president; James D. Hamill, treasurer, and Bowie Johnson, secretary.

Mr. Tasker further says that experts estimate that the power can be generated at a cost of only \$2 per horse-power per annum, which can be leased in Pittsburg and other towns and mining regions contiguous to the power plant. Capitalists, however, refuse to finance the enterprise until the effects of the panic are over, and the proposed railroads are, therefore, waiting for the development of the water-power.

### Farmersville to the Gulf.

President J. C. Nolan of the Ruston, Natchitoches & Northeastern Railroad Co., Ruston, La., informs the MANUFACTURERS' RECORD that the route will be about as recently published from Farmersville, La., via D'Arbonne, Ruston, Saline, Natchitoches and Leesville, La., into Texas, and thence to a point on the Gulf of Mexico, probably Port Arthur, about 260 miles. It will connect with the Missouri Pacific Railway at Farmersville, with the Rock Island system and the Queen & Crescent Route at Ruston, with the Louisiana Northwestern at Saline, the Texas & Pacific at Natchitoches and the Kansas City Southern at Leesville, La. The exact location has not been determined south of Leesville.

Continuing, President Nolan says: "This line opens up a very rich farming country and vast bodies of yellow pine and hardwood in Union, Lincoln, Jackson, Natchitoches and Vernon parishes. The work will be comparatively light, and the tonnage now in sight is ample to assure heavy business from the start. Bonuses amounting to \$100,000 will be given by towns and parishes on the first 25 miles.

"Contract has not yet been let, but we expect to call for bids as soon as estimates now being made up have been prepared."

### Bainbridge Northeastern.

Mr. J. M. Wilkinson, third vice-president of the Georgia & Florida Railway, who is also receiver for the Bainbridge Northeastern Railroad of Bainbridge, Ga., writes from Valdosta, Ga., to the MANUFACTURERS' RECORD that the Bainbridge road is not doing any building, and, as far as he knows, there are no prospects of any construction being done in the near future.

The Bainbridge Northeastern was chartered last September by E. Swindell and others, but it recently went into the hands of a receiver. It was projected northeast from Bainbridge to Pelham, Ga., 35 miles, but it was also proposed to build southward from Bainbridge into Florida and thence to the Gulf of Mexico.

The Georgia & Florida Railway, of which Mr. Wilkinson is an officer, is the line being built by John Skelton Williams and others from Augusta, Ga., to Madison, Fla., but whether there is any probability of the Bainbridge Northeastern being absorbed by that company does not appear.

### Marshall to Port Arthur.

The Sabine Valley Railway Co., chartered to build a line from Marshall, Texas, southward toward Port Arthur, Texas, will, it is reported, secure a subscription of \$30,000 from the town of Marshall and

free right of way through the county, including 12 miles of grade already completed and about 30 acres for terminals. A survey was completed for the first 22 miles, and a reconnaissance has been made for the entire line from Marshall to Port Arthur, which, it is said, will pass through heavy timber all the way from Marshall to a point near Orange, Texas, and will open up a region now without railway facilities and promising good tonnage.

The officers of the company are John Auchinclass of West Orange, N. J., president; L. E. Walker of Marshall, Texas, first vice-president and general manager; E. P. Taylor, Jr., of New York city, second vice-president; H. L. Jackson, consulting engineer; R. Y. Walker, engineer in charge.

### On the New Savannah Road.

The Savannah, Augusta & Northern Railroad Co., which is building the new line from Savannah, Ga., to Chattanooga, Tenn., has made a report to the Georgia Railroad Commission showing the amount of work that has been done in the past year. Construction was begun at Statesboro, Ga., and 25 miles of line have now been fully completed from that point to Garfield, Ga., on the Millen & Southwestern Railway. From Garfield to Louisville, Ga., grading has been practically completed, and construction is being pushed to that point and also to Thomson, Ga., whence the line has been definitely located via Spread, Ga., Thomson being on the Georgia Railroad.

Beyond Thomson surveys have been made and the line practically located as far as Washington, Ga., but the rights of way have not yet been all secured, and the route might be changed. Surveys have been made beyond Washington, Ga., but no location made and no rights of way obtained.

### Will Operate Into Mobile.

The Tombigbee Valley Railroad, according to information received by the MANUFACTURERS' RECORD, will operate trains into Mobile, Ala., by connection with the Southern Railway at Calvert, Ala., 35 miles north of Mobile. This new road is in operation from Calvert to Silas, Ala., and is to be built from the latter point northward to Cochrane, the Southern terminus of the Alabama, Tennessee & Northern Railroad, which is under the same ownership. When this is done there will be a through line completed from Calvert to Reform, Ala., with connection from Calvert to Mobile. It is also said that the Alabama, Tennessee & Northern Railroad is to be ultimately extended from Reform to Birmingham, Ala.

John T. Cochrane of Mobile is president of these two roads, and he has recently perfected arrangements with the Southern Railway for the new train service.

### Southern to Issue New Securities.

The Southern Railway Co., according to a report from New York, will immediately issue some new securities, it is understood, in the form of short-term notes. The company now has two note issues outstanding, one for \$16,000,000, which matures next April, and another for \$15,000,000, which matures in February, 1910. It is further said that J. P. Morgan & Co. will announce the sale of the securities.

### New Railroad for Georgia.

Mr. Frank R. Durden, president and treasurer of the Durden Pine Co., Germania Bank Building, Savannah, Ga., writes the MANUFACTURERS' RECORD confirming the report that he and associates have applied for a charter for the Cotton



Belt Railroad Co. to build a line from Louisville, Ga., to a point on the Savannah river at or near Shell Bluff Landing, about 50 miles. The line will cross the Georgia & Florida Railway at Vidette, Ga., and the Central of Georgia Railway at Waynesboro, Ga. The organization will not be perfected until the charter is granted, which will probably be in about three weeks.

#### Will Build to Tom's Creek.

The Virginia & Southwestern Railway Co., according to a report from Bristol, Tenn., has filed a mortgage to secure \$7,000,000 of bonds in connection with its recent purchase of the Holston River Railway and the Black Mountain Railway. It is also announced that the Virginia & Southeastern Railway Co., incorporated two or three years ago by the same interests, has been transferred to the Virginia & Southwestern, with rights of way from Clinchport, Va., to Tom's Creek, Va., the purpose being to build a line to the Tom's Creek coal fields. Henry K. McHarg is president of the railroad, and J. B. Newton is vice-president and general manager.

#### Its First Passenger Train.

The first passenger train run over the Atlanta extension of the Atlanta, Birmingham & Atlantic Railway was a special carrying President H. M. Atkinson and a party of New York and Boston capitalists who had been inspecting the line and also the line of the Tampa Northern Railroad, of which he is also president. A regular passenger service is expected to be established soon. Among those in the party with Mr. Atkinson were Percy R. Pyne and A. D. Russell of New York, James A. Parker, C. F. Ayer and Marshall H. Clyde of Boston, and H. A. Parker of Chicago, a consulting engineer.

#### Roanoke River Railway Changes.

A controlling interest in the Roanoke River Railway Co., Townsville, N. C., according to official information received by the MANUFACTURERS' RECORD, was recently purchased by G. W. Marrow, who continues as president. J. T. Marrow, treasurer, has been elected secretary, succeeding T. C. Trenchard, resigned. V. C. Tompkins general freight agent, has been elected vice-president, succeeding Mr. W. E. Trenchard, resigned. W. J. Tally, superintendent, has been elected auditor, succeeding Mr. Marrow, who was elected secretary, all being directors and all serving dual positions.

#### Alexander to Elkins.

The Alexander & Eastern Railway Co. has been chartered to build a line from Alexander, W. Va., to Elkins, W. Va., 25 or 30 miles. The incorporators are John B. Hart and Charles M. Hart of Clarksburg, W. Va., where the headquarters are at 806 West Pike street. The authorized capital stock is \$100,000.

#### Railroad Notes.

The Ware Shoals Railroad Co., according to a report from Columbia, S. C., will be organized by the Ware Shoals Manufacturing Co. to operate its branch line of road. T. P. Cochran is attorney.

The Piedmont Air Line announces that Mr. S. W. Britton has been appointed soliciting agent, with headquarters at 299 Broadway, New York city, vice Mr. E. B. Johns, resigned to engage in other business.

Mr. J. L. Meek has been appointed assistant general passenger agent of the Southern Railway, with office at the Equitable Building in Atlanta, Ga., succeeding Mr. R. W. Hunt, who has been transferred and promoted.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

#### Building in 1907.

The total cost of the buildings erected in the principal cities of the United States in 1907 was \$661,076,286, according to Mr. Jefferson Middleton of the United States Geological Survey, who has collected statistics on this subject in connection with his work on the clay-working industries.

Compared with the cost of buildings in the same cities in 1906, these figures show a net decrease of \$17,634,683, or 2.60 per cent.; they are, however, 2.55 per cent. in excess of the figures for 1905 and 40.86 per cent. greater than in 1904.

Although the total cost of buildings in the 49 cities reporting was decreased, the number of permits increased from 181,174 in 1906 to 184,055 in 1907. In some cities more than one building was erected under one permit, but as a rule a permit was issued for each building.

The city showing the greatest decrease in cost of buildings is New York, the value of whose operations fell off \$41,591,982, or 26.84 per cent. St. Louis showed the next largest decrease—\$8,045,526, or 26.87 per cent.; next is Chicago, which reported a falling off of \$5,616,245, or 8.68 per cent. Philadelphia, Boston and Brooklyn also showed decreases in 1907, though Brooklyn nearly held its own, the decrease being only \$149,304, or .21 per cent., a better showing than that of any other of the very large cities in which normal conditions prevailed. In Baltimore, where large gains had been reported in 1904 and 1905 as the result of the fire in 1904, the cost of building operations also decreased, though it was more than twice as great in 1907 as in 1903, when the cost was but \$3,327,225. It is probable that most of the decreases were due to the financial disturbance during the latter part of the year, although the decrease in Los Angeles, which has shown remarkable increases in past years, appears to have been due rather to scarcity and high cost of material than to the business depression.

Twenty-five cities reported an increase in cost of building operations. In San Francisco, owing to the local conditions following the fire, the increase was \$56,574,844, the total amount being nearly 162 per cent. in excess of the cost for 1906. The total number of permits issued in 1907 for buildings in San Francisco was 12,126, and the cost of the buildings was \$91,502,240. In 1905, the year prior to the fire, its building operations cost \$18,268,753. In Cambridge, Mass., which, with the exception of San Francisco, showed the largest proportionate gain, the erection of several large mercantile buildings swelled the total. Cleveland's building industries seem not to have been affected by the financial depression, showing an increase of \$2,915,433, or 22.47 per cent., over the figures for 1906. The reports for Milwaukee show an increase of more than a million dollars, due to the increase in the number of fireproof or fire-resisting buildings erected.

The character of the buildings erected was reported by 44 of the 49 cities, or nine more than in 1906. From these reports it appears that 60.88 per cent. of the permits issued were for wooden buildings, and 39.12 per cent. for fire-resisting buildings, thus indicating that even in these larger cities of the country the wooden buildings still greatly outnumber those made of fire-resistant materials. As might be expected, however, the cost of the more permanent structures is much the greater, amounting to \$409,434,858, or 72.67 per cent. of the total, while that of the wooden structures

was but \$154,005,626, or 27.33 per cent. of the total. The average cost of brick or stone buildings in 1907 was \$9,490; that of wood buildings was but \$2294.

Philadelphia shows the largest number of brick or stone buildings erected, and, with the exception of Reading (where no wooden buildings were erected), the smallest number of wooden buildings; the average cost of the former was \$3221 and of the latter \$1800. In New York the average cost of brick or stone buildings was \$49,693. No wooden buildings were erected in the borough of Manhattan, those reported being in the Bronx. Next to New York, Brooklyn reports the greatest cost of brick or stone buildings, although the average was comparatively small, being but \$9310. In Chicago also the average cost of brick or stone buildings was low—\$6161. The substantial character of the buildings erected in San Francisco is shown by the fact that the average cost of 1190 brick or stone buildings was \$43,638. In Cambridge the average cost for fire-resisting buildings was \$46,000, and in Lowell \$40,854. The highest average cost in the cities reporting, however, was \$60,000, in Seattle.

San Francisco reports the largest number of wooden buildings—7453, costing \$32,579,343, an average of \$4371. The only other city reporting wooden buildings to the cost of over \$10,000,000 was Chicago, where 2310 buildings of this character were erected at a cost of \$15,702,000, or an average of \$6797—a greater average than for those of stone or brick, and a very high average for structures of this class. In the following 15 cities the cost of the wooden buildings erected exceeded that of the fire-resisting buildings: Atlanta, Buffalo, Detroit, Grand Rapids, Indianapolis, Kansas City, Kans., Los Angeles, Minneapolis, Newark, Providence, Rochester, Scranton, Seattle, Syracuse and Worcester.

Detailed statistics of the building operations in the United States in 1907, tabulated in comparison with those of previous years, have been prepared by Mr. Middleton for publication in an advance chapter from Mineral Resources of the United States, Calendar Year 1907, which will be ready for distribution in the course of a month or six weeks.

#### Activity in Building.

According to reports from Southern and Southwestern cities, increased activity is noted in building operations, and only in a few cities is there shown a decrease for April as compared with operations for March. Much activity is manifested in every section of Atlanta, Ga., and hundreds of new residences, as well as other structures, are being erected. Permits have been issued during the first four months of the year for structures representing a valuation of \$1,977,225. This shows a decrease of \$66,255 as compared with the same period last year, but building contractors and dealers in building material say that labor is 25 per cent. lower this year than it was last year, which effects a saving of one-fourth on the cost. In Savannah, Ga., a total of 55 permits was issued in April, as compared with a total of 19 in March, while indications point to a continued increase during May. The record of building operations in Birmingham, Ala., for April indicates a total valuation of about \$130,000, which is an increase over operations for March. It is expected that May will show another increase. A total of 88 permits was issued in Tampa, Fla., during April, representing a valuation of \$132,325, included in which were 63 frame dwellings, valued at \$83,000, and four brick business buildings, valued at \$42,000. As compared with March, the value of operations in Tampa

during April shows an increase of \$75,885. A total of 141 permits was issued in Chattanooga, Tenn., during April, representing a valuation of \$195,137, which is an increase of about \$90,000 over the total valuation for March. In Memphis, Tenn., 225 permits were issued during the month, representing a valuation of \$248,795. As compared with the corresponding month last year, these figures show a decrease. An increase of about 40 per cent. is shown in building operations in San Antonio, Texas, for April over March, the number of permits issued during the month amounting to 178, representing a valuation of \$139,095. An expenditure of over \$30,000 is indicated by permits issued in Austin, Texas, during April, while the record for Galveston represents an expenditure of about \$25,000, and for Beaumont of about \$28,000. Permits were issued in the District of Columbia during April for structures estimated to cost \$1,092,458, which indicates a decrease of about \$98,000 as compared with March. A total of 119 permits was issued in Baltimore, Md., representing a valuation of \$486,355. This is an increase of nearly \$100,000 over any previous month of 1908.

#### Show a Decrease.

Figures arranged by the statistical department of the Yellow Pine Manufacturers' Association indicate a decrease in the number of orders entered and the amount of shipments from Southern mills during March, 1908, as compared with March, 1907. Data from 158 mills in the States of Missouri, Oklahoma, Arkansas, Texas, Louisiana, Mississippi, Alabama, Georgia and Florida shows total orders of 7486 cars entered during March, 1908, as against a total of 10,998 entered during March, 1907, a net decrease of 3512 cars. Total shipments amounted to 143,772,990 feet during March, 1908, as compared with total shipments of 194,654,363 feet during March, 1907, while the total output for March, 1908, amounted to 136,852,437 feet, as against a total of 183,648,199 feet for March, 1907.

#### Sawmill Men Discouraged.

The annual meeting of the Georgia-Florida Sawmill Association, presided over by President H. H. Tift, met at Tifton, Ga., last week with a full attendance. Members of the association reported that market conditions have not improved, and only a few mills are running on full time. Officers were elected as follows: H. H. Tift, president; E. C. Harrell, secretary; J. L. Phillips, treasurer, all of Tifton, Ga.; William B. Stillwell, Savannah, Ga., vice-president for Georgia; J. B. Conrad, Glenwood, Fla., vice-president for Florida. The next meeting of the association will be held at Atlantic Beach, Fla., on June 6.

#### Big Sawmill to Start.

A report from New Orleans, La., states that in order to make immediate use of the millions of feet of pine trees which have been prostrated by cyclones, the Great Southern Lumber Co. is making preparations to start its big sawmill recently completed at Bogalusa, La. It expects to construct about 20 miles additional of logging road, and will commence work within a short time. Mr. W. H. Sullivan is the general superintendent of the company at Bogalusa.

#### Lumber Notes.

Building operations in Kansas City, Mo., for April represented an expenditure of \$1,000,050, an increase of 47 per cent.

Lumber shipments from Gulfport, Miss., during April amounted to 24,985,000 feet, making a total for the first four months of the year of 96,554,000 feet. April's shipments were valued at \$519,188.

## MECHANICAL

### Modern Reinforced Concrete Textile Mill.

That the South is destined to become a center of textile manufacturing is of such

bodily all those details so essential to fire protection and maximum results at minimum outlay in manufacturing. A building of this character does not cost much more than the ordinary structure less suited to economical manufacture, and men of broad ideas will readily recog-

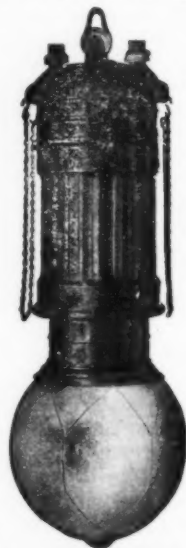
ables the engineer or architect to give to his clients those requisites so long sought for in one material, viz., stability, durability, absolute protection from fire, abundance of light and economy of maintenance.

Two accompanying illustrations show a

This structure is of reinforced concrete construction throughout, except that the exterior walls are brick-faced. It is five stories high, 101x153 feet. As will be noticed from the illustrations, ideal textile-mill conditions have been met, as is evidenced in the broad expanse of windows and the abundance of light and arrangement of mechanical equipment in the interior. On the interior floors will be seen the "Steele" system of providing attached shaft hangers, the sprinkler and humidifying systems and the arrangement of the spinning machinery. On the ends of the building will be noted the enclosed towers, which contain the elevators and stairways. This entire building, including the design, erection and arrangement of interior mechanical equipment, is the product of the forces of the Wm. Steele & Sons Company, which makes a specialty of the design and erection of every kind of modern industrial building.

### A New Flame Arc Lamp.

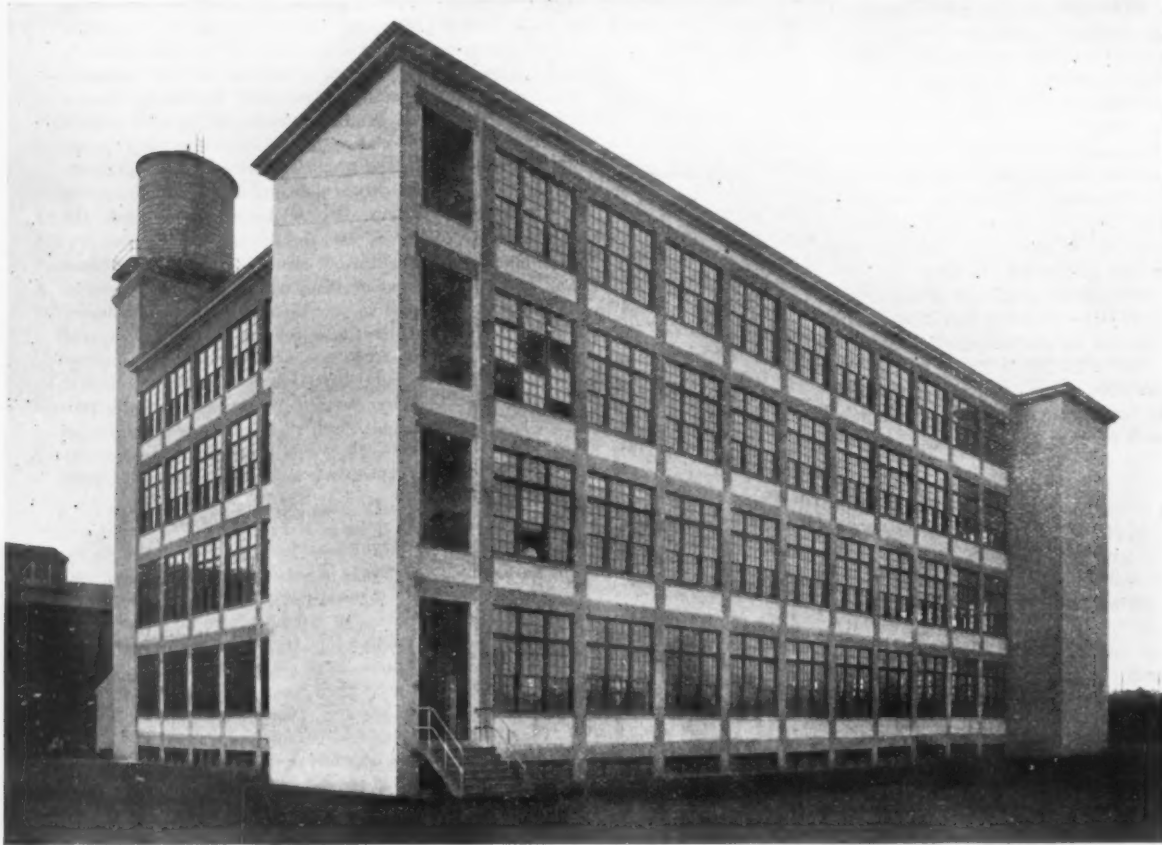
A new flame arc lamp has been placed on the market by the General Electric Co. of Schenectady, N. Y. The external appearance of this lamp is similar to the G.I. enclosed lamp, the casing being drawn seamless from either sheet copper or steel. The standard finish for the copper casing



A. C. OR D. C. CONVERGING CARBON TYPE FLAME ARC LAMP.

is "antique" and "bright japan" for the steel. The lamp has no chain feed or complicated escapement and clock mechanism. It is of the inclined carbon type, with nothing below the arc to obstruct the light, and both carbons feed by gravity simultaneously, while the regulation of the arc is accomplished by the lateral movement of one carbon to the other. When the casing is lowered into the trimming position every part of the lamp becomes accessible. Herewith is an illustration of the new lamp.

A serviceable "economizer" of refractory material surrounds the points of the carbon just above the arc, so as to prevent the "washing" of the carbon ends, and to steady the arc from the effect of air currents so far as possible. A "blow magnet" is so situated with relation to the arc that it performs the double function of keeping the arc steadily fan-shaped at the carbon tips, and also totally extinguishes the arc if for any reason it approaches dangerously near to the "economizer." The "economizer," therefore, is well protected from burn out, and should last indefinitely. A heavy "baffle plate" of insulating material is provided just above the "economizer," effectually preventing any appreciable amount of the products of the arc from depositing on the parts of the mechanism. During operation the lower surface of the bottom plate of the lamp and



EXTERIOR MODERN REINFORCED CONCRETE TEXTILE MILL.

moment as to cause those who have in charge the erection of the mills to realize that they are not building them as a tentative proposition, but to last for many years and to become features of the

nize that in subsequent years the resultant benefits will more than outweigh the extra expenditure.

The success which has followed the construction of modern industrial buildings

modern reinforced concrete textile mill erected by the William Steele & Sons Co., engineer and constructor of modern industrial buildings, 1060 Arch street Philadelphia, Pa., for the Erben-Harding Com-



INTERIOR MODERN REINFORCED CONCRETE TEXTILE MILL.

South's leading industry. The question of first cost should not deter cotton-mill builders from the selection of the best and most modern structure possible, and em-

of reinforced concrete has caused it to be accepted by manufacturers, architects and engineers as a material which lends itself to ideal factory conditions, and which en-

pany, Tacony, Philadelphia, Pa., and is indicative of the class of structure which will appeal to the Southern textile manufacturer.



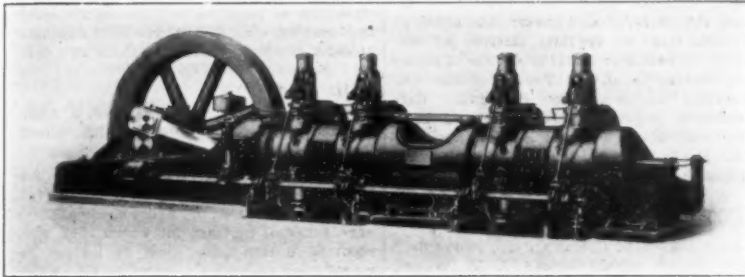
of the economizer becomes coated with white deposit from the arc, which acts as an excellent reflector for the upward light from the arc.

This new lamp is designed to burn two in series or singly across 100 to 125-volt direct or alternating current circuits. It can be used on any frequency between 40 and 140 cycles; it may be wound for either 8, 10 or 12 amperes, the latter current being considered standard. All lamps are equipped with light opal globes.

The company says the life of the lamp

a design suitable to the use of producer, blast furnace or other by-product gases.

Mesta gas engines are designed for operation on the four-cycle principle, built either tandem or twin tandem. This method of placing the two double-acting cylinders in tandem results in two power strokes per revolution, giving very close regulation and making it feasible to operate 60-cycle generators in parallel without the use of flexible coupling. Where the twin tandem type is employed the power strokes are doubled, and results in the same



THE MESTA GAS ENGINE.

is about 12 hours on indoor circuits and between 10 and 11 hours on outdoor circuits, and that the simple construction, remarkably high efficiency and the volume of illumination obtained from the type appeal to the operators of mills, wharves, warehouses, erecting shops, foundries and other places where the quantity of light is as desirable as the quality.

#### The Mesta Gas Engine.

The important position in the power field now occupied by the modern heavy-duty gas engine has received careful consideration by the Mesta Machine Co. of Pittsburg, Pa., and after several years of close observation of the various types developed both here and abroad the company has actively taken up gas-engine design and construction along with its regular established heavy-duty Corliss and piston valve reversing steam engines.

Since the Mesta Machine Co. has for years been designing and building engines of the largest sizes for rolling mill and blast furnace work, these engines being characterized by an exceptionally massive and rigid construction, coupled with simplicity and accessibility of working parts, it is fair to assume that these same features of design are found in the gas-engine construction. The question of materials is well taken care of, for the Mesta plant is equipped with air furnaces supplying an iron of high tensile strength and of superior wearing qualities so necessary in cylinder construction, open-hearth furnaces for steel castings containing nickel or vanadium, as may be desired; also a complete brass foundry. This combination of foundries, joined with many years' experience and modern shop facilities, afford the necessary qualifications to successfully build this comparatively new type of heavy-duty prime mover.

An accompanying illustration shows the general arrangement of the 600-horse-power 400-kilowatt direct-connected unit now being constructed in the Mesta works at West Homestead, and typifies the series of sizes called for in the designs as at present laid down. In this engine are embodied the best features of European and American practice, improvements which tend toward more economical and successful operation under the exacting conditions of widely-fluctuating load, so frequently met in American practice.

While natural gas as a source of power is now an attractive proposition, it has been considered that producer gas will eventually supplant it, and careful attention has been given to the development of

effective torque as in a cross-compound steam engine.

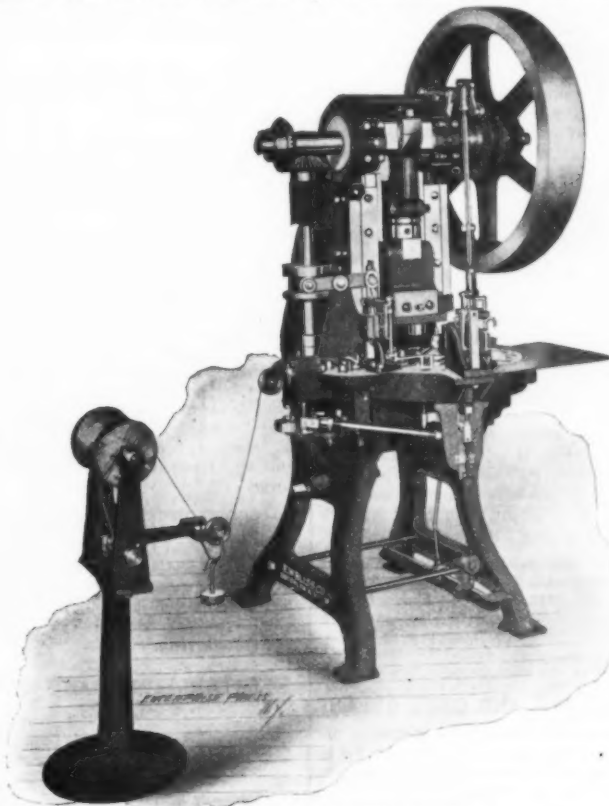
The design throughout is characterized by massive construction, well suited to the demands of the most severe operating conditions, but in obtaining this necessary strength the matter of accessibility and simplicity has not been lost sight of.

Following the American custom, the overhung crank construction is used, and owing to the tandem arrangement careful attention has been given to the matter of longitudinal expansion, the cylinders be-

P. to 4000 B. H. P., the Mesta Machine Co. has secured the services of Frederick Ottosen, who has had wide European and American experience in gas-engine design, and has spent over a year in the development of the design illustrated.

#### Bliss Solder Cap Hemming Machine.

An accompanying illustration shows a new design solder cap hemming machine built by the E. W. Bliss Company, No. 3 Adams street, Brooklyn, N. Y. The machine embodies the latest improvements that experience in designing and operating this class of machinery has suggested. It is entirely automatic, cutting, forming and attaching the solder to caps for fruit cans, after which the finished cap is positively removed, it only being necessary for the operator to place caps in the bushings of the revolving dial plate. While the operation of the machine is entirely automatic, it is simple. From the spool placed on the reel shown at the left side of the press the wire is fed by means of feed rolls, which are operated by means of a Geneva wheel driven by the vertical shaft on left side of machine, operated, in turn, through the bevel gears shown on end of crankshaft. The feed rolls are adjustable, so that by a slight turn of a lever the rolls can be either engaged or disengaged. Passing through the feed rolls the wire is fed into the first operation die, which is operated by toggles driven by a race cam fastened to the vertical shaft. Here the solder is cut off to length and formed into a circle, after which it drops into the dial bushing directly underneath and is carried with the next revolution of the press under the first of two punches carried by the slide, where it is flattened, passing on the next revolu-



BLISS SOLDER CAP HEMMING MACHINE.

ing permitted to expand or contract with the varying temperature, while in no way affecting the engine alignment.

Simplicity and reliability are attained in the valve gear by first doing away with the spiral gear drive for the lay shaft, and secondly, by operating both inlet and exhaust valves from a single eccentric. All parts subject to wear are fitted with adjustable devices of proved effectiveness, the aim being to produce an engine well suited to the demands of 24-hour service.

For the development of this line of engines, ranging in capacity from 500 B. H.

tion of the press to the second operation punch, where the forming is done.

Next the blanks, which are fed from the table at right side of press, are dropped into the bushings, in which the solder ring is formed, and are carried under a punch operated in the sub-press directly in front of the slide, where the solder is fastened to the caps, the punch of the sub-press being driven from the vertical shaft by means of a cam through toggles and a connecting rod.

The cap now having the solder attached is raised flush with the top of the bolster

by means of a positive knockout. While in this position a positive sweep acts and throws the finished cap into a receptacle conveniently placed to receive it. A positive knockout return rod insures the return of the pads in the bushings to their proper position before the bushing passes under the first operation die, in which the solder is cut and fed.

In designing the machine consideration was given to the fact that possibly the operator through neglect might not feed caps into the bushings into which solder had previously been deposited, so to avoid the possibility of feeding two pieces of solder for one cap the press is arranged to automatically stop in the event of the operator failing to place a cap in each bushing, and overcomes the consequent risk of injuring the closing punch. It also has a tendency to keep the operator alert, for as soon as the feeding is stopped the press stops. The dial is driven by a Geneva wheel, and to insure against any possible accident in case of the dial not registering accurately the press is fitted with a safety stop connected with the clutch. In the event of the dial not registering accurately this stop is arranged to act on the clutch and immediately stops the press.

The press has a capacity of 75 caps per minute and weighs 2500 pounds.

#### The Crocker-Wheeler Motors.

In describing and illustrating motor-driven pumps last week the MANUFACTURERS' RECORD inadvertently stated the pumps are manufactured by the Crocker-Wheeler Company of Amper, N. J. This statement should have been that the motors for driving the pumps are manufactured by the Crocker-Wheeler Company, the latter being widely known as a manufacturer of electrical machinery.

#### National Manufacturers' Association.

Among the announced speakers at the banquet in connection with the thirteenth annual convention at New York, May 18-20, of the National Association of Manufacturers are Wu Ting-fang, Minister from China, "American Industries and Chinese Trade;" Hon. Albert J. Beveridge, Senator from Indiana, "Why a Non-Political Commission is Essential to Tariff Reform;" Hon. J. F. Fort, Governor of New Jersey; Hon. Charles E. Littlefield of Maine, "The Issue That Confronts Business Men;" General Fred D. Grant, U. S. A.; Hon. Gifford Pinchot, chief forester, "Preserving Our Forest Wealth;" Hon. Job Hedges of New York, Judge W. H. Speer of New Jersey; Mr. Alexander Gilbert of the New York Clearing House, "Pending Currency Legislation;" Mr. Alfred H. Post of New York, "Exporters' Problems;" Mr. James A. Emery of New York, "Legislation Affecting Industrial Relations;" Mr. George H. Maxwell of Chicago, "Sources of the Nation's Wealth;" Mr. William McCarroll of New York, member Public Utilities Commission, "Government by Commission;" Mr. George J. Seabury of New York, "Our Industrial and Commercial Problems and How to Promote Foreign Trade;" Mr. Rowell Evans of Philadelphia, "Fire Protection."

The convention will meet at 2 o'clock on the afternoon of Monday, the 18th, for organization.

The Gulf Coastal Canal Convention met last week at Mobile, Ala., with Col. E. L. Russell of Mobile, president; Leland J. Henderson of Apalachicola, secretary, and George H. Hoyle of Battles, Ala.; Philip Yonge of Pensacola, Fla.; Charles A. Swift of Columbus, Ga.; Warren B. Reed of New Orleans; B. H. Ellis of Pascagoula, Miss., and Robert G. Randolph of Chicago, vice-chairmen.

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

## BRIDGES, CULVERTS, VIADUCTS

Ardmore, Okla.—J. W. Ham is engineer in charge of construction of steel bridges across Caddo creek near Ardmore. (Recently noted.)

Cedartown, Ga.—Polk county will construct steel or concrete bridge over Cedar creek; bids will be opened May 18; J. C. Walker, clerk. (See "Machinery Wanted.")

Ensley, Ala.—Tennessee Coal, Iron & Railroad Co., Birmingham, recently reported to construct bridge across Village Creek at Ensley, will have plans made and structure erected by company's force.

Fredericksburg, Texas.—Texas Short Line, D. C. Earnest, general manager, Dallas, Texas, will, it is reported, build 10 iron bridges and one tunnel on proposed branch line from Comfort, Texas, to Fredericksburg. (See "Railway Shops, Terminals, Round-houses, etc.")

Greensburg, Ky.—Green county awarded contract for construction of bridge across Green river at Berry's Ford; cost \$8000. Address County Commissioners.

Gulfport, Miss.—Harrison county awarded contract to Austin Bros. of Gulfport at \$7775 to construct drawbridge across Tchoutacabouffa river.

Nashville, Ark.—Memphis, Paris & Gulf Railroad, C. C. Henderson, general manager, Nashville, awarded contract to Kansas City Bridge Co., Kansas City, Mo., to construct 400-foot steel bridge over Little river at Nashville. (Mentioned in April.)

Opelousas, La.—Missouri Valley Bridge & Iron Co., Leavenworth, Kan., has contract to construct steel bridge over Bayou Rouge at Faulkness Ferry; contract price \$7991.

Parkersburg, W. Va.—Parkersburg Bridge Co., James A. Newell, East Liverpool, Ohio, president, has had plans prepared by E. K. Morris, Pittsburg, Pa., for construction of bridge across Ohio river between Parkersburg and Belpre, Ohio; estimated cost \$400,000. (Recently mentioned.)

Presidio, Texas.—Kansas City, Mexico & Orient Railway, M. P. Paret, C.E., Kansas City, Mo., will construct bridge across Rio Grande river.

Vicksburg, Miss.—Warren county will construct steel bridge over Big Black river at Ivanhoe Ferry, estimated to cost \$11,000. Address County Commissioners.

Waycross, Ga.—Charlton County Commissioners contemplate bond issue of \$100,000 for improvements to country schools, roads and bridges.

Wheeling, W. Va.—Wheeling Bridge Co. will make improvements to bridge recently mentioned; H. A. Dunlevy, Wheeling, in charge; toll bridge. Steel stringers will be constructed in place of wood and new oak flooring laid on roadway; cost about \$35,000.

Voth, Texas.—Keith Lumber Co. will erect bridge across Pine Island Bayou; cost \$1500; architect, R. E. Masterson; W. C. Keith, engineer in charge. (Recently mentioned.)

## CANNING AND PACKING PLANTS

Austin, Texas.—Texas Pure Food Co., Geo. S. Walton, president, incorporated to manufacture canned goods and chili powder; temporarily located and operating at corner Red River and East 3d streets; S. C. Granberry, manager.

Burgin, Ky.—Burgin Canning Co. incorporated with \$10,000 capital stock by J. A. Nooe, George C. Hall, J. T. Freeman and others.

Guineys, Va.—Caroline Canning Co. incorporated with \$5000 capital stock; S. H. Evans, president; W. R. Thompson, secretary-treasurer, both of Guineys; N. L. Mills, vice-president, Marye, Va.

Moyock, N. C.—R. O. Bagley contemplates erection of vegetable cannery. (See "Machinery Wanted.")

Poplar Bluff, Mo.—Hogg Packing Co. incorporated with \$5000 capital stock by S. K. Seger, James E. Hogg and M. L. Hogg.

Rome, Ga.—Berry Industrial School, Mr. McClain, professor of industrial department, will build cannery; capacity, 10,000 three-pound cans daily; building, 24x70 feet; cost \$1500.

San Antonio, Texas.—J. G. Carpenter, Houston, Texas, will not establish fig cannery; recently incorrectly reported.

## CLAYWORKING PLANTS

Croft (not a postoffice), N. C.—Chas. F. Smith, Cornelius, N. C., will establish plant to manufacture building brick; daily capacity 40,000. (Recently noted under Derita, N. C.)

Hot Springs, Ark.—Hot Springs Clay & Products Co. incorporated with \$1,000,000 capital stock by Lee Worthington, C. L. Shattuck, Ed H. Johnson and others to establish pottery and develop about 300 acres of clay land.

Langley, S. C.—American China Co., Toronto, Ohio, has, it is reported, purchased Peerless Kaolin Co.'s clay properties, comprising 160 acres near Langley, and will undertake development, manufacturing firebrick, tiling, piping and possibly chinaware.

Okmulgee, Okla.—Okmulgee Coal & Brick Co. has completed brick plant near Okmulgee; cost of buildings and machinery \$40,000; will manufacture press, paving and buff brick; A. C. Free, president; S. J. Allen, general manager.

## COAL MINES AND COKE OVENS

Charleston, W. Va.—Raven Collieries incorporated with \$200,000 capital stock by E. P. Mucklow, W. W. Mucklow, C. W. Morton, R. H. Richardson and others.

Fenwick, W. Va.—Fenwick Land & Coal Co. contemplates immediate development of its coal and timber land at Fenwick; coke ovens will be built.

Gray, Ky.—Lynn Camp Coal Co., Lawrence H. Hedrick, president, has increased capital stock from \$30,000 to \$60,000.

Huntington, W. Va.—Wilson-Edmunds Coal Co. incorporated with \$50,000 capital stock; C. R. Wilson, president, secretary and treasurer; R. W. Edmunds, vice-president and manager; main offices in Frederick Building.

Knox County, Ky.—John G. Matthews, president Matthews-Jellico Coal Co., Barbourville, Ky., has purchased coal lands in Knox county and will install mining plant to cost \$30,000 to \$40,000.

Pineville, Ky.—Central Coal Co. incorporated with Job Jones president.

## CONCRETE AND CEMENT PLANTS

El Paso, Texas.—Southwestern Portland Cement Co. (capitalized at \$2,200,000) has accepted plans, selected machinery and will at once begin construction of Portland-cement plant; capacity about 1500 barrels daily; buildings to be principally of reinforced concrete; equipment will be operated by separate motors direct connected by flexible couplings, and includes two 8x150-foot rotary kilns; will use fuller mills throughout on coal, raw material and clinker, and series of blending bins to regulate mixture of material; investment about \$1,000,000. Cement Engineering Co., Union Trust Building, Los Angeles, Cal., is engineer in charge. Carl Leonhardt is president; Inman Moore, engineer and manager, both of Los Angeles, Cal.; A. Courchesne, vice-president and general manager. (Mentioned in March.)

## COTTON COMPRESSES AND GINS

Adel, Ga.—Adel Cotton Oil Co. reorganized with \$34,000 capital stock; J. T. Wilkes, president. (See "Cottonseed-oil Mills.")

Bradford, Tenn.—Farmers' Union Gin Co. incorporated with \$3000 capital stock by D. L. Patrick, J. H. Holmes, H. S. Smith and others.

Falfurrias, Texas.—Farmers' Gin & Milling Co. will build cotton gin to cost about \$15,000; contract for equipment awarded to San Antonio Machine & Supply Co., San Antonio, Texas.

Falfurrias, Texas.—Falfurrias Power Co. will enlarge cotton gin, increasing from four to eight stands; contract for equipment awarded to San Antonio Machine & Supply Co., San Antonio, Texas.

Filbert, S. C.—H. E. Nell will erect gin; to be operated by electric-power.

Hickman, Ky.—Farmers' Gin & Drain Co. incorporated by D. B. Wilson, W. C. Johnson and Frank Watson.

Hico, Texas.—Collier Bros. will erect cotton gin.

Idlewild, Tenn.—Idlewild Union Gin Co. incorporated by T. W. Waldrop, J. F. Miller, J. M. Vick and others.

Mangum, Okla.—Mangum Cotton Yard & Compress Co., recently reported incorporated, will erect platform 300x600 feet for handling cotton; cost of building, \$5000; will add compress later; president, J. N. Caddell; secretary, O. L. Gibson.

Memphis, Tenn.—Farmers' Gin, Compress & Cotton Co. has purchased Farmers' Compress Co. of Memphis and will make improvements to plant; contemplates erecting larger plant in near future, probably locating in New South Memphis. Company is incorporated with \$1,000,000 capital stock; Harvie Jordan, Atlanta, Ga., president; Dr. Heber Jones of Memphis, vice-president and general manager, and J. I. Mather, Atlanta, Ga., secretary; offices in Tennessee Trust Building, Memphis, with Mr. Mather in charge.

## COTTONSEED-OIL MILLS

Adel, Ga.—Adel Cotton Oil Co. reorganized with \$34,000 capital stock to continue Adel Cotton Oil Co., operating cotton gin; will erect cottonseed-oil mill; J. T. Wilkes, president; J. H. May, vice-president; G. P. Leggett, secretary-treasurer.

## ELECTRIC-LIGHT AND POWER PLANTS

Abbeville, S. C.—City is contemplating bond issue of \$25,000 to purchase and improve Abbeville Light & Power Co.'s plant; J. L. McMillan, Mayor.

Berlin, Md.—City would grant franchise for construction of electric-light plant; Orlando Harrison, Mayor. (See "Water-Works.")

Carrollton, Miss.—City will rebuild electric-light plant. Address The Mayor.

Clinton, La.—Committee recently reported appointed is investigating relative to establishment of electric-light and ice plant to be controlled by city; wish to correspond with engineers or firms; I. L. Heyman, member of committee. (See "Machinery Wanted.")

Dallas, Texas.—City is considering granting franchise to J. Ford House, J. B. Adoue and associates to furnish heat, refrigeration and power.

Flemingsburg, Ky.—Flemingsburg Light & Ice Co., recently reported incorporated, will

establish electric-light and ice plants; will erect brick building 66x52 feet; cost \$2500; cost of machinery \$5000; capacity electric-light plant, 250 kilowatts, 230 volts; manager, J. L. O'Bannon; engineer in charge, Carl O'Bannon; contracts made. (See "Ice and Cold-storage Plants.")

Frankfort, Ky.—Prof. Paul Anderson and L. K. Frankel of State University, Lexington, Ky., will prepare and submit plans to Capitol Commission for power-house and installation of plant to furnish electric lighting, heating, etc.; \$460,000 has been appropriated for completion and furnishing new capitol; Augustus E. Wilson, Governor. (Recently mentioned.)

Fullerton, Ky.—Fullerton Power & Light Co. incorporated by Albert Smith, Frank Swearingen and Elizabeth J. Swearingen.

Jackson, Ga.—J. G. White & Co., 49 Exchange place, New York, have, it is reported, begun construction of hydro-electric plant near Jackson, contract for which they were reported during past week as having received from Georgia Construction Co., which will carry out development for Central Georgia Power Co.; Chas. F. Howe, chief engineer, Grand Building, Macon, Ga. It is understood dam will be 1425 feet long, forming lake of six square miles; dam to have head of 100 feet and generate 20,000 horsepower for transmission by electricity. Bonds for \$2,500,000 and stock for \$400,000 are stated to have been issued on this development, the initial one of the company's plans. (Other details noted heretofore.) Flint River Power & Electric Co. (subsidiary of Central Georgia Power Co.) is now arranging to issue \$10,000,000 bonds and \$12,000,000 common stock for development of Flint river water-power property, near Albany, Ga. It will probably soon give consideration to contracts for Flint river plant.

Little Rock, Ark.—Little Rock & Hot Springs Electric Railway, C. J. Kramer, president, will build electric-power plant.

Ludowici, Ga.—City is interested in construction of electric-light plant. Address The Mayor.

Mcabe, Mo.—Martin Power Co., recently reported (under West Plains, Mo.), contemplates erection of power plant; size not determined; will install water turbines, direct connected to three-phase 2300-volt 60-cycle generators; size of units to be decided later; engineer and architect, C. K. Martin, West Plains.

Millville, W. Va.—Winchester & Washington City Railway Co. has awarded all contracts for doubling its plant, referred to last week. Dayton Globe Iron Works Co., Dayton, Ohio, has contract for two pairs of turbine wheels, each developing 1000 horsepower, to be transmitted to generators through continuous rope drive designed and built by Dodge Manufacturing Co., Mishawaka, Ind.; generators of 500 kilowatts each, of alternating-current type, to be made by Westinghouse Electric & Manufacturing Co. of Pittsburgh, Pa.

Roanoke, Va.—Roanoke Water Power Co. is perfecting plans to light streets and public parks of city, for which contract has been secured; about 250 arc lamps will be furnished for five years; W. E. Thomas, City Clerk; W. B. Bates, City Engineer. (Mentioned in March.)

Somerville, Texas.—Somerville Light & Ice Co. incorporated with \$25,000 capital stock by J. D. Giddings and R. E. Bledsoe, both of Somerville; E. V. Remington, Oklahoma City, Okla.

St. Andrews, Fla.—St. Andrews Electric Light & Power Co. will be incorporated by J. H. Drummond and others to furnish electric light and power and build 15-ton ice plant.

Stillwater, Okla.—City has voted \$7000 electric-light bonds; John L. Bishop, Mayor; C. O. Edgerton, City Clerk. (Recently mentioned.)

Vicksburg, Miss.—The Bullis Company, S. S. Bullis, president, has purchased Vicksburg Street Railway & Lighting Co. and will organize Vicksburg Power Co. to furnish electric power.

Waurika, Okla.—City is having plans prepared and will advertise for bids within about 30 days for electric-lighting system, consisting of 50 arc lamps of 2000 candle-power and 4000 incandescent lamps of 16 candle-power; plant will be operated by steam; cost about \$15,000; O'Neil Engineering Co., Wilson Building, Dallas, Texas, is engineer. (Mentioned in March.)



**FLOUR, GRIST AND MEAL MILLS**

Ganado, Texas.—Farmers' Warehouse & Milling Co., Ward McAlester, president, contemplates building flour mill.

Kremlin, Okla.—Kremlin Mill & Elevator Co. incorporated with \$50,000 capital stock by M. C. Jones, W. T. Jones and John D. Arends.

Oklahoma City, Okla.—Standard Milling Co. incorporated with \$50,000 capital stock by C. H. Allen, Oklahoma City; Buell Cook and C. J. Setterlind, Chipley, Fla.

**FOUNDRY AND MACHINE PLANTS**

Baltimore, Md.—Brass Foundry.—F. M. Macken & Co., 507-509 North Spring street, will enlarge brass foundry; additional story 31½ feet square will be erected on building 509 North Spring street; two-story brick addition, 18x31 feet, will be built in rear of foundry, 507 North Spring street.

Birmingham, Ala.—Sashweights.—Birmingham Sashweight Co., recently reported incorporated, will establish plant in East Birmingham to manufacture cast-iron sashweights; capacity, one car daily; office, 215 Brown-Marx Building; M. L. Falk, president, secretary and treasurer; R. M. Long, vice-president and superintendent.

Chattanooga, Tenn.—Engines, etc.—Massillon Engine & Thresher Co. incorporated with \$50,000 capital stock to continue Southern branch office of Russell & Co., Massillon, Ohio, manufacturers of hauling engines, circular-saw mills, automatic engines and threshing machines; R. E. Marshall, president and treasurer; E. C. Merwin, vice-president; H. A. Forshog, secretary.

Knoxville, Tenn.—Mining and Contractors' Equipments.—Wm. J. Oliver Manufacturing Co. is proceeding with the construction of its proposed new erecting shop, 80x220 feet, and providing other improvements, including remodeling of power plant, installation of machinery for conveying heavy products, etc.

Memphis, Tenn.—Garage.—W. S. Bruce & Co., 242 Monroe street, will erect garage and repair shop recently mentioned; one-story building; brick wall, 86x144 feet; concrete floor; cost \$11,000; machinery to cost about \$2000; architects, Shaw & Pfeil, Memphis; Wm. Pease, engineer in charge.

New Orleans, La.—Cotton Compresses and Gins.—Southern Gin-Compress Co. incorporated with capital stock of \$300,000 to consolidate Luce Compress & Cotton Co. of New Orleans and Thomas Gin-Compress Co. of Little Rock, Ark., manufacturers of cotton compresses and gins—combined equipments; will sell outright or install on royalty; L. L. Lampton of Magnolia, Miss., president; Geo. A. Zabriskie of Minneapolis, Minn., vice-president; Sol Wexler of New Orleans, treasurer, and Silas A. Hyman of New Orleans, secretary. (Previously referred to.)

Oklahoma City, Okla.—Steam Cooker.—Aluminum Steam Cooker Co. incorporated with \$100,000 capital stock by George Giddings and G. W. Lindley, both of Oklahoma City; C. W. Sterick, S. J. Criss and others, Fort Worth, Texas.

Savannah, Ga.—Electric Supplies.—Electric Supply Co. will erect building; three stories and basement; brick; front of pressed brick and plate glass; third floor will be equipped as workshop, and will permit of installation of 25 winding machines; total floor space about 11,900 square feet; elevator; cost, with site, about \$20,000; contractors, A. A. Artley & Son of Savannah.

Sheffield, Ala.—Pipe Foundry.—Sheffield Cast-Iron Pipe & Foundry Co. will issue \$300,000 of bonds to enlarge and improve pipe foundry; new machinery will be installed.

St. Louis, Mo.—Boiler-washing Machinery.—American Boiler-Washing Co. incorporated with \$50,000 capital stock by Frederick A. Gale, Adolph Horn and L. Frank Ottofy.

St. Louis, Mo.—Iron.—Spuck Iron & Foundry Co. has purchased site 60x125 feet on which to erect addition to plant.

St. Louis, Mo.—Pulp Machines.—Enrich Pulp Machine Co. incorporated with \$10,000 capital stock by F. M. Wohle, Z. G. South, Max A. Cohn and others.

Tulsa, Okla.—Stoves.—Sterling Stove Co., Pittsburg, Pa., is considering establishment of plant to manufacture gas ranges and stoves.

**GAS AND OIL DEVELOPMENTS**

Center, Texas.—Tenaha-Center Oil Co. organized with S. T. Freshman, president; C. O. Bryan, vice-president; L. W. Palmer, secretary; F. C. Powell, treasurer; W. C. Mortimer, general manager; has leased 40 acres of oil lands for development.

Fort Smith, Ark.—Arkansas and Territo-

rial Oil & Gas Co., Chas. Van Sickle, manager, will construct belt line of six-inch main around Fort Smith.

Guthrie, Okla.—East Coast Oil & Gas Co. incorporated with \$350,000 capital stock by H. W. and L. E. Pentecost and G. V. Pattison.

Jennings, La.—Knott Oil Co. incorporated with \$10,000 capital stock; A. R. Knott, president; C. D. Silven, vice-president; R. W. Bank, secretary; J. H. Helmen, treasurer.

Muskogee, Okla.—Sunrise Oil Co. incorporated with \$10,000 capital stock by Irwin Donovan, J. J. Grever and E. X. Griesel.

Nowata, Okla.—Norton Oil & Gas Co. incorporated with \$18,000 capital stock by Geo. E. Summers, Jesse B. Hogue and William V. French.

Nowata, Okla.—Claggett Oil Co. incorporated with \$5000 capital stock by J. L. McMahon and Charles Brown, both of Nowata; R. S. Vann, Cedar, Okla.

Sapulpa, Okla.—Mary, Martha & Ruth Oil Co. incorporated with \$50,000 capital stock by Virgil Hicks of Sapulpa; T. B. Bliss, Muskogee, Okla.; H. E. Clark, Glenn Campbell, Pa.

Shreveport, La.—Black Bayou Oil Co. incorporated with \$30,000 capital stock; L. E. Etchison, president; Isaac Barron, vice-president; H. L. Hellperin, secretary-treasurer.

Tulsa, Okla.—Muskegon Oil Co. incorporated with \$50,000 capital stock by C. D. Coggeshall, Frank S. Craver and G. H. Coggeshall.

**ICE AND COLD-STORAGE PLANTS**

Americus, Ga.—R. L. and Walter Maynard have purchased City Ice Co.'s plant.

Baltimore, Md.—Vacuum Ice Co., 28-40 South Front street, recently reported incorporated, will erect new plant; details not announced; president, D. E. Hallock; vice-president, D. Y. Hallock; secretary and treasurer, H. W. Hallock; superintendent, John Patten; daily capacity plant, 90 tons vacuum ice.

Berlin, Md.—City contemplates establishment of ice plant; Orlando Harrison, Mayor. (See "Water-Works.")

Clinton, La.—City may install ice and electric-light plant recently mentioned. (See "Electric-light and Power Plants" and "Machinery Wanted.")

Denison, Texas.—Swift Packing Co. is reported to erect brick building, 25x130 feet, to be equipped with cold-storage machinery; plant to be completed by August 1.

Flemingsburg, Ky.—Flemingsburg Light & Ice Co., recently reported incorporated, will establish five-ton ice plant; will erect brick building 66x52 feet; J. L. O'Bannan, manager; Carl O'Bannan, engineer in charge; contracts made. (See "Electric-light and Power Plants.")

Ludowici, Ga.—It is reported that 10-ton ice plant will be established. Address The Mayor.

Roanoke, Va.—Frank Brown will build cold-storage plant. (See "Miscellaneous Enterprises.")

Somerville, Texas.—Somerville Light & Ice Co. incorporated with \$25,000 capital stock by J. D. Giddings and R. E. B. Bledsoe, Somerville; E. V. Remington, Oklahoma City, Okla.

Shiner, Texas.—A. J. Blohm, M. E. Wolters, Joseph Macha and others are promoting establishment of ice plant and creamery.

St. Andrews, Fla.—St. Andrews Electric Light & Power Co. will be incorporated by J. H. Drummond and others to establish 15-ton ice factory. (See "Electric-Light and Power Plants.")

**IRON AND STEEL PLANTS**

Boyles, Ala.—Birmingham Coal & Iron Co. has blown in its new iron furnace near Boyles; capacity 250 tons daily; old furnace of 125 tons capacity daily blown out for repairs; H. M. Atkinson, Atlanta, Ga., president; James Bonnyman, general manager, Woodward Building, Birmingham, Ala.

Bristol, Tenn.—Virginia Iron, Coal & Coke Co., Willoughby Newton, superintendent, will put in operation its Crescent Rolling Mills; New York offices at 40 Wall street.

Ensley, Ala.—Tennessee Coal, Iron & Railroad Co. will put in operation about June 15 its open-hearth department and rail mill at steel plant; also will then blow in the rolling mills at Bessemer, Ala.; improvements have been made to the rail mill by installing new machinery; general offices at Birmingham, Ala.; New York offices at 115 Broadway.

**LUMBER-MANUFACTURING PLANTS**

Alto, Texas.—Blount-Decker Lumber Co., E. A. Blount, Nacogdoches, president, recently noted organized and to make improvements to acquired plant, will manufacture yellow pine; capacity 50,000 feet daily. (See "Machinery Wanted.")

Baxter, Tenn.—Baxter Planing Mill Co. incorporated with \$5000 capital stock by E. F., B. E., C. G. and M. C. Ward and J. W. Goolsby.

Bellamy, Ala.—Allison Lumber Co. has begun improvements to plant, including erection of planing mill which, when equipped, will give daily capacity of 75,000 feet; six brick drykilns with daily drying capacity of about 100,000 feet, equipment to be furnished by National Drykiln Co., Indianapolis, Ind.; remodeling of blowpiping and pumping systems; installation of high-pressure boiler in sawmill, etc.

Dahlonega, Ga.—Piedmont Land & Lumber Co. incorporated with \$200,000 capital stock by W. S. Morse, Charles C. Morse, John P. Morse and Howard C. Morse, all of Rochester, N. Y.; Alfred E. Edcomb, Knoxville, Pa.

Est. Ky.—H. G. Caudill will develop 1000 acres of timber land at Upper Looney creek, where he is moving portable sawmill; contemplates installing another mill.

Fenwick, W. Va.—Fenwick Land & Coal Co. contemplates developing at once its timber and coal land at Fenwick. (See "Coal Mines and Coke Ovens.")

Hartley, Ky.—John Hopkins, Jr., has purchased for development 5000 acres of timber land and will erect portable sawmill.

Houston, Texas.—Ohio-Texas Lumber Co. incorporated with \$60,000 capital stock by C. W. Hahl, F. A. Connable and M. J. Snelvy.

Memphis, Tenn.—York-Browning Lumber Co. incorporated with \$50,000 capital stock by J. B. York, C. L. Browning, P. H. Gates and others.

Piedmont, W. Va.—Brown Lumber Co. incorporated with \$50,000 capital stock by W. R. Williams, John Mackie, G. M. Brown and others.

Poley, Ala.—Miller-Brent Lumber Co. will rebuild drykilns burned at a loss of \$45,000.

Richmond, Va.—Yellow Pine Lumber Co. incorporated with \$50,000 capital stock; J. S. Gordon, president, Baskerville, Va.; W. L. Elkins, vice-president; P. F. Williams, secretary, both of Richmond, Va.; C. R. Dunn, treasurer, Baskerville, Va.

Riverside, Ark.—Carter-Glatly Lumber Co. incorporated with \$20,000 capital stock by R. J. and J. D. Carter and William and Emma Glatly.

St. Louis, Mo.—Klemeyer Lumber Co. incorporated with \$50,000 capital stock by Wm. T. Jones, H. C. Barker, W. W. Seibert and others.

**MINING**

Bridgewater, Va.—Onyx, Marble, etc.—Shenandoah Valley Development Co. organized to develop deposits of onyx, marble, slate, etc.; contemplates installing machinery to quarry and saw, to crush limestone, to mine iron, etc.; also contemplates building dam to furnish power. W. H. Bright of Hampstead, Md., is president, offices at Bridgewater; F. R. Bagwell, secretary, offices at 420 Law Building, Baltimore, Md.

Columbin, Tenn.—Independent Phosphate Co. contemplates installing two or three new washers with 50,000 tons per annum capacity each; cost about \$10,000 each; O. L. Dortch, general manager.

County Line, Postoffice Mocksville, N. C.—Gray Gold Mining Co. has, it is reported, leased its mines to Northern syndicate, which will install new machinery and undertake further development.

Langley, S. C.—American China Co., Toronto, Ohio, has, it is reported, purchased for development 100 acres of kaolin lands near Langley. (See "Clayworking.")

Liberty, Texas.—Sulphur.—American Sulphur & Oil Co. organized with capital stock of \$2,000,000 to develop sulphur deposits in Liberty county; is now drilling and plans to melt sulphur under ground by superheated steam and pump melted sulphur to surface. The company claims it will have an initial equipment for 1000 tons capacity daily; John W. Harrison, Third National Bank Building, St. Louis, Mo., is president; William Einstein, also of St. Louis, is treasurer; A. L. Lyons of Liberty is superintendent. (This proposed development previously mentioned.)

Llano, Texas.—Gold.—F. M. Ramsey, Lampasas, Texas, has closed an option for \$25,000

on gold property at Llano; development work will be undertaken at once.

Pacolet, S. C.—Granite.—Minerva Savings & Trust Co., Minerva, Ohio, has purchased Keystone Granite Co.'s granite properties at Pacolet and is reported to reorganize company.

**REPLIES TO LETTERS.**

When anyone invites information about machinery which he wants or other things which he is seeking, it would seem that courtesy to those who comply with the request demands a brief acknowledgment, even if nothing but a postal card. On the other hand, it can hardly be expected that all of the circulars and letters sent to prospective customers, who have not specifically sought such information, should require immediate acknowledgment. The MANUFACTURERS' RECORD sends to Northern and Western people, as well as to Southern, thousands of personally addressed letters, but it does not expect to receive replies from everybody to whom they are sent. It recognizes that it is almost impossible for some concerns to undertake to do this. It is a rule in this office to acknowledge every letter, but thousands of firms are so situated, by reason of lack of typewriting facilities, as to make this impossible. It would, however, add vastly to the pleasure and profit of doing business if, as far as possible, receivers of letters bearing on business possibilities should at least briefly acknowledge their receipt. Through correspondence of this kind acquaintanceships are made, business friendships often develop, and no man knows how much good to his own interests may result from prompt correspondence on such lines.

And in writing always mention the MANUFACTURERS' RECORD.

Regarding the advantages, to which we have alluded, accruing to manufacturers, business men and others in at least trying to reply promptly to inquiries based upon announcements made in the "Construction Department" and the "Machinery Wanted" and "Business Opportunities" columns of our issues, the Douglas Electric Construction Co., Limited, of New Orleans, La., writes:

"We are in receipt of your card entitled 'Do You Do It?' The question is easily answered by us: 'We do.' In answering all advertisements, letters regarding electrical work, etc., we always mention that we saw the mention in the MANUFACTURERS' RECORD."

Mr. E. E. Jungmichel of Walburg, Texas, writes:

"I have written to dozens of advertisers in your paper since I became a subscriber, and have not failed in a single instance to mention your paper. I don't think that I would do you or the advertiser justice if I did not do so. You may rest assured that every time I write to anyone whose advertisement I see in your paper I will mention where I have seen it."

Mr. R. H. Kelly of the Atlanta (Ga.) office of the Virginia Bridge & Iron Co. of Roanoke, Va., in the hope of interesting and advantaging other subscribers, writes:

"Regarding answers to inquiries from parties interested in various trade items reported in your publication, as stenographer for the Atlanta office of this company it is my duty to follow up the trade items of interest to us. In almost every case I enclose either a return postal card or a return stamped envelope requesting a reply, and nearly all inquiries of value are answered. For convenience in filing, etc., whenever a postal card is used the information wanted is stated in a very concise, condensed notation at the top of the card. Of course, all our inquiries do not bring forth a reply, but the majority of them do."

Does not that interest many other subscribers? And do not they find that such system is advantageous to everybody concerned?

**MISCELLANEOUS CONSTRUCTION WORK**

Baltimore, Md.—Bulkhead.—City will construct stone and timber bulkhead on north side of center pier, back basin; contract will be let May 20; O. F. Lackey, Harbor Engineer. (See "Machinery Wanted.")

Dallas, Texas.—Heating, etc.—City is considering granting franchise to J. Ford House, J. B. Adoue and associates to furnish heat, refrigeration and power.

Fort Taylor (not a postoffice), Fla.—Seawall, etc.—Penn Bridge Co., Beaver Falls, Pa., is lowest bidder at \$55,400 to construct seawall at Fort Taylor, and Howard Trubbo, probably of Key West, is lowest bidder at 38½ cents per yard for filling in land to be reclaimed.

Memphis, Tenn.—Gate.—Competitive plans will be invited for memorial gate to be placed in Overton Park; Robert Galloway, chairman Memphis Park Commission.

Ocean City, Md.—Dike and Inlet.—Sinepuxent Salt Water Inlet Co. will build dike across Sinepuxent bay, recently reported (under "Berlin, Md."); preparatory to construction of salt water inlet; engineers in charge, Dodge & Day, Philadelphia, Pa.; construction near Ocean City; company's offices, Berlin, Md.; John T. Keas, manager. (See "Machinery Wanted.")

Plaquemine, La.—Dredging.—Bids are invited to complete work of digging Bayou Bourbeux, 161 acres, approximately 120,000 yards of dirt. For further information address R. G. Comeaux, secretary. (See "Machinery Wanted.")

Port Arthur, Texas.—Drainage.—Hans Falkenburg, civil engineer, and Nellie Richardson have begun survey of Nederland-Port Arthur Drainage District, comprising about 18,000 acres of marsh land, preparatory to installation of drainage system; expect to build about 12 miles of drainage canal. (Recently mentioned.)

Savannah, Ga.—Jetty Construction.—R. G. Ross, Jacksonville, Fla., is lowest bidder at \$2.47 per ton, or aggregate cost of \$74,100, for raising and repairing south jetty in Cumberland sound at entrance to Fernandina harbor; will require about 30,000 tons of stone. Col. Dan C. Klingman, in charge of local U. S. Engineering Corps, will recommend acceptance of bid.

#### MISCELLANEOUS ENTERPRISES

Baltimore, Md.—Automobiles and Supplies. Auto & Accessories Manufacturing Co. incorporated with \$250,000 capital stock by William O. Welson, 508 North Fulton avenue; James S. Reese, W. Graham Boyce and others.

Baltimore, Md.—Land Improvement.—Linthicum Heights Company incorporated with \$8000 capital stock by J. Charles Linthicum and Seth H. Linthicum, both of J. Charles Linthicum & Bro., 220 St. Paul street; G. Milton Linthicum, Professional Building, and others.

Baltimore, Md.—Land Improvement.—Magothy River Suburban Developing Co. incorporated with \$250,000 capital stock by E. John Nichols, 1414 Mt. Royal avenue; W. Murray Correll, Belview avenue, near Eldorado avenue, and others.

Baltimore, Md.—Land Improvement.—Menlo Park Land Co. incorporated with \$75,000 capital stock by Frank Tierney, Howard and Franklin streets; Robert B. Smith, 204 North Gay street; Roderick D. Coe, 727 Law Building, and others.

Birmingham, Ala.—Construction.—Phoenix Construction Co. incorporated with \$5000 capital stock; John Bell, president; J. E. Hollingsworth, vice-president; F. S. Abernathy, secretary-treasurer.

Concord, N. C.—Steam Laundry.—The Electric Laundry has completed installation of machinery; operate by electric power; W. S. Bingham, manager.

Dallas, Texas.—Publishing.—Trade Journal Publishing Co., C. A. Singer, vice-president and general manager of local plant, is planning to erect eight-story building costing between \$80,000 and \$100,000; main offices in St. Louis, Mo.

Eschite, Okla.—Hardware.—Townsend, Ford & Schick Hardware Co. incorporated with \$10,000 capital stock by J. D. Townsend and H. B. Ford, both of Eschite; George M. Schick, Houston, Texas.

Fort Valley, Ga.—Orchard.—Georgia Orchard Co. incorporated with \$160,000 capital stock by W. F. Miller and J. F. Troutman, both of Fort Valley; E. V. Remington, Oklahoma City, Okla.

Fort Worth, Texas.—Amusement Park.—T. B. Meeks, Grand Saline, Texas, and J. S. Smith, 106 West 11th street, Fort Worth, are establishing amusement park in South Fort Worth; will construct skating rink, dancing pavilion, miniature railway, etc.; Mr. Smith in charge.

Greensboro, Fla.—Hardware.—Jas. A. Dezell will establish hardware business; to handle general hardware and mill supplies. (See "Machinery Wanted.")

Helena, Okla.—Development Company.—Helena Development Co. incorporated with \$15,000 capital stock by O. A. Brewer, F. W. Edmonds and E. S. Wilbrite.

Knoxville, Tenn.—Construction Company.—Cuban Construction Co. incorporated with \$19,000 capital stock by W. J. Oliver, H. L. Pike, H. B. Lindsey and others.

Lebanon, Ky.—Publishing.—Leader Publishing & Printing Co. incorporated by Percy H. Johnston, J. A. Smith and T. C. Jackson.

Louisville, Ky.—Sanitary Company.—Louisville Sanitary Co. incorporated by Frederick Bacon, S. W. Greene and Henry J. Tilford.

Louisville, Ky.—Concrete Construction.—American Concrete Construction Co., 900 Lincoln Savings Bank Building, incorporated with \$5000 capital stock to do general concrete construction work, wrecking, excavating and grading; F. W. Graham, general manager.

Mt. Sterling, Ky.—Construction Company.—Northern Construction Co., 625 Railway Exchange Building, Chicago, Ill., recently reported incorporated, has elected A. White, 315 Englewood avenue, Chicago, president; plans for location, building, etc., not decided.

Muskogee, Okla.—Amusement Company.—Star Amusement Co. incorporated with \$50,000 capital stock by R. L. Nay, M. M. Lain and H. A. Thomas.

Nashville, Tenn.—Steam Laundry.—H. W. Osborn will establish laundry.

Nashville, Tenn.—Grain.—McLemore Grain Co. incorporated with \$30,000 capital stock by E. A. Gordon, J. B. McLemore, H. J. Connor and Bradley Walker.

New Orleans, La.—Coal, etc.—Wheatcroft Coal Co. incorporated with \$25,000 capital stock by George Mule, Pascal Americo and John Lutzza.

Norfolk, Va.—Printing Plant.—Burke & Gregory will erect printing plant to increase present capacity about 60 per cent.; building will be 60x200 feet; two stories; reinforced concrete construction; wire, glass and metal windows; cost about \$35,000; additional machinery will cost about \$45,000, and include individual motors to operate each machine; isolated plant to supply light and heat; pneumatic cleaners and ventilation system to supply warm and cool air; plans are being prepared by Neff & Thompson of Norfolk, and will soon be submitted to contractors.

Norfolk, Va.—Laundry.—Quartermaster, U. S. Marine Corps, Washington, D. C., will receive proposals until May 29 on erection and equipment of laundry at navy-yard, Norfolk. (See "Machinery Wanted.")

Oklahoma City, Okla.—Contracting.—Oklahoma City Construction Co. incorporated with \$50,000 capital stock by J. W. Wheeler and A. A. Byers, both of Oklahoma City; John Ozmun, El Reno, Okla.

Petersburg, Va.—Publishing.—Virginia Printing & Manufacturing Co. incorporated with \$20,000 capital stock; H. F. Munt, president; W. A. Williamson, vice-president; W. B. Harrison, secretary-treasurer.

Roanoke, Va.—Abattoir.—Frank E. Brown will build slaughter-house; brick and concrete; 30x30 feet; cold-storage plant in connection.

Roanoke, Va.—Contracting.—Virginia Structural Co. incorporated with \$25,000 capital stock to build bridges and manufacture structural steel; J. H. Whitner, president; J. R. Parker, secretary-treasurer; A. Z. Drozdov, chief engineer.

Norfolk, Va.—Laundry.—Contract will be let May 29 for erection of laundry at navy-yard, Norfolk; F. L. Denny, Colonel, Quartermaster, U. S. Marine Corps, Washington, D. C. (See "Machinery Wanted.")

St. Louis, Mo.—Contracting.—Philip Construction & Investment Co. incorporated by Philip G. Hoffman, Mayme M. Hoffman and Albert E. Hausman.

Waverly, Va.—Hardware.—Wilcox Hardware Co. incorporated with \$15,000 capital stock; J. E. Wilcox, president; J. E. Moss, general manager and treasurer; E. N. Burt, secretary.

Wheeling, W. Va.—Supplies.—Perbelkin Supply Co. incorporated with \$10,000 capital stock by A. S. Bell, E. L. Perkins, E. G. Perkins and others.

Winchester, Va.—Hardware.—John S. Solenberger & Co. incorporated with \$30,000 capital stock; W. H. Baker, president; John S. Solenberger & Co., B. E. Baker and H. M. Solenberger.

Yazoo City, Miss.—Garbage Crematory.—City contemplates building garbage crematory; Edward Luke, Mayor.

#### MISCELLANEOUS MANUFACTURING PLANTS

Athens, Ga.—Springs and Iron Beds.—Athens Mattress & Spring Bed Co., N. D. Arnold, president, will install machinery to manufacture bed springs and iron beds. (See "Machinery Wanted.")

Atlanta, Ga.—Street Sweeper.—Automatic Vacuum Street Sweeper Co. incorporated with \$150,000 capital stock by John R. Jones, Fred A. Bishop and Joseph Seligman.

Atlanta, Ga.—Candy and Cracker Factory.—Harry L. Schlesinger will rebuild cracker and candy factory burned at loss of \$200,000; temporary offices, 42 South Broad street.

Atlanta, Ga.—Suspenders.—Warren Manufacturing Co., G. W. Seay, president, has increased capital stock and will rebuild burned plant; temporary offices, 16½ East Mitchell street.

Atlanta, Ga.—Bakery.—Schlesinger-Meyer Baking Co. will rebuild bakery burned at loss of \$20,000; temporary office at 42 South Broad street.

Baltimore, Md.—Toys.—Crescent Toy Manufacturing Co., recently reported incorporated, will establish toy-manufacturing plant on Wilkens avenue extended; cost of machinery, \$1250; product, sawed toys, etc.; president, Turner W. Isaac; vice-president and manager, Chas. J. Dorsey; secretary and treasurer, W. Gordon Isaac.

Beaumont, Texas.—Oil Refinery.—W. P. Bowles, it is reported, is interested in erection of oil refinery.

Brinkley, Ark.—Creamery.—Brinkley Creamery Co. incorporated with \$15,000 capital stock by H. C. Strong, L. K. Brown, Tim Shultz and others.

Clifton Forge, Va.—Gloves.—W. M. Smith will operate plant to manufacture jeans working gloves.

Dickson, Tenn.—Medicines.—Eberhart Pharmaceutical Co. incorporated by Charles E. Eberhart, Dr. H. C. Guerni, J. A. Clement and others.

Fulton, Ky.—Overalls and Coats.—Fulton Overall Manufacturing Co. is being organized by R. M. Chowning and others, with capital stock of \$12,000, to manufacture overalls and work coats; machinery purchased. (See "Machinery Wanted.")

Gastonia, N. C.—Glove Factory.—Gastonia Glove Manufacturing Co., D. W. Drum, general manager, will establish plant for manufacturing gloves.

Greensboro, N. C.—Medicines.—Goose Grease Co. incorporated with \$100,000 capital stock by R. F. Rice, W. R. Land and B. H. Merrimon.

Hagerstown, Md.—Shirt Factory.—Hagerstown Shirt Manufacturing Co., M. S. Smith, manager, will rebuild factory recently burned; will enlarge capacity to 10 or 12 dozen shirtwaists daily; brick building 30x40 feet will be erected at cost of \$1000; cost of machinery \$1200.

Henderson, N. C.—Farming Implements.—J. C. Kittrell and A. J. Harris, both of Henderson; Alexander A. Bullock, Williamsboro, N. C., will organize company to manufacture patented combined cotton chopper and cultivator.

Hugo, Okla.—Implements.—Hugo Implement Manufacturing Co. incorporated with \$30,000 capital stock by Edwin Moore, P. E. A. Fling, W. E. Moore, T. C. Smith and B. D. Jordan.

Kansas City, Mo.—McCain Manufacturing Co. incorporated with \$5000 capital stock by C. S. McCain, Henry I. McCain and A. C. Ashley.

Kansas City, Mo.—Manufacturing.—Stoker Manufacturing Co. incorporated with \$10,000 capital stock by M. L. Metcalf, I. W. Stoker and W. E. Stoker.

Knoxville, Tenn.—Toilet Preparations.—Aseptino Manufacturing Co. incorporated with \$5000 capital stock by B. F. Radabaugh, B. Goetz, E. W. Ogden and others.

Lebanon, Tenn.—Chemicals.—Head Chemical Co. incorporated with \$5000 capital stock by J. W. Head, John Cowan, Kirk L. Tinsley and Sam Hawks, Jr.

Louisville, Ky.—Gelatin.—Louisville Gelatin Works incorporated with \$25,000 capital stock by Philip and Milton Conrad, both of Louisville, and Charles M. Zink, New Albany, Ind.

Martinsburg, W. Va.—Rendering Plant.—C. J. Spalding will establish rendering plant; Joseph Artz of Martinsburg has contract to erect building; frame; two stories, 40x30 feet; equipment will include engine, boiler, cooker, drier, etc.

Melonic, La.—Oil Refinery.—St. Bernard Oil Refining Co. incorporated with \$100,000 capital stock; Thomas C. Anderson, president; George B. Cox, vice-president; Louis B. Samsot, treasurer, all of New Orleans, La.

Memphis, Tenn.—Bakery.—M. Moskovitz will erect two-story brick addition to bakery; cost \$4000; Henry Moselage of Memphis, contractor.

Memphis, Tenn.—Chemicals.—National Chemical Co. incorporated by W. T. Walker, L. D. Harris, Thomas A. Evans and others.

Norfolk, Va.—Bakery.—The New Adams Bakery, Lawrence A. Lathrop, president, 81-87 Fenchurch street, will erect building to replace structure recently reported burned; three-story brick and concrete building; cost about \$20,000; cost of machinery about \$10,000.

Norton, Va.—Bottling Works.—Norton Pepsi-Cola Bottling Co. incorporated with \$35,000 capital stock; F. B. Kline, president; G. D. Kilgore, vice-president; G. C. Kline, secretary-treasurer.

Paris, Texas.—Creamery.—Paris Creamery Co. organized with J. C. McCrummen, president; F. B. Fenet, vice-president; A. H. Meyers, secretary; F. D. Mallory, treasurer.

Roanoke, Va.—Overalls, etc.—Cassell & Elliott are interested in contemplated establishment of overall and shirt factory. (See "Machinery Wanted.")

Shiner, Texas.—Creamery.—A. J. Blohm, M. E. Wolters, Joseph Macha and others have been appointed to promote establishment of creamery and ice plant.

Shreveport, La.—Bottling.—Avenue Bottling Works, 1408 Texas avenue, organized by N. E. Miller and others to manufacture soda water; cost of machinery \$1800; capacity, several thousand bottles daily.

St. Louis, Mo.—Bottling Works.—United Bottling Co. incorporated with \$200,000 capital stock by William Freudenauf, J. William Taylor, Charles A. Hautz and others.

St. Louis, Mo.—Corks.—Ira T. McCready Cork Co. incorporated with \$30,000 capital stock by Thomas W. White, William A. Speelman and Ira T. McCready.

Stuttgart, Ark.—Rice Mill.—Stuttgart Rice Mill Co. has increased capital stock from \$50,000 to \$100,000.

Tulsa, Okla.—Oil By-products.—E. A. Foster, Chicago, Ill., will, it is reported, expend \$25,000 to establish plant to manufacture by-products of crude oil.

Tulsa, Okla.—Well Packers.—Spang & Co. of Butler, Pa., and Coffeyville, Kan., will erect brick building recently reported; to be equipped for manufacturing oil and gas well packers; cost \$5000; manager and architect, Geo. Aspeng.

Tulsa, Okla.—Oil Refinery.—Robert Galbreath will, it is reported, establish oil refinery.

Ybor City, Ind. Station, Tampa, Fla.—Cigar Factory.—M. Stachelberg & Co. and Esberg-Gunst Company, Henry Esberg, president, 126 Fifth avenue, New York, will rebuild cigar factory recently burned; will erect extension 50x236 feet; brick; three stories; full basement; architects, Miller & Kennard, Tampa; daily capacity plant, 100,000.

#### RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Fredericksburg, Texas.—Texas Short Line, D. C. Earnest, general manager, Dallas, Texas, will, it is reported, erect four stations, two coal stations, two repair shops, two roundhouses, four steel water tanks, 10 iron bridges and one tunnel on proposed branch line from Comfort, Texas, to Fredericksburg; supplies required will include turntables, water-softening plants, etc.

Johnson City, Tenn.—Carolina, Clinchfield & Ohio Railway, M. J. Caples, chief engineer, Johnson City, will build shops; location not decided.

#### ROAD AND STREET IMPROVEMENTS

Albany, Ga.—Dougherty county will vote June 4 on \$30,000 bond issue for macadamizing and improving roads. Address County Commissioners.

Atlanta, Ga.—City contemplates appropriating \$5000 to pave Decatur street with bitulithic. Address The Mayor.

Baltimore, Md.—Contract will be let May 23 for improving State road No. 1, Section 9; work includes grading and macadamizing of about three miles of road; W. W. Crosby, chief engineer, Maryland Geological Survey. (See "Machinery Wanted.")

Chattanooga, Tenn.—City Council has approved 85 blocks of street paving, or approximately seven miles. Address The Mayor. (Various street improvements previously mentioned.)

Clarksville, Va.—City will lay about 2000 yards of granolithic pavement; bids will be opened May 25; Samuel Davis and G. E. Vaughan, Street Commissioners. (See "Machinery Wanted.")

Fayetteville, N. C.—City has voted \$30,000 of bonds for street paving; V. C. Bullard, Mayor. (Recently mentioned.)

Fort Worth, Texas.—City has voted \$150,000 of bonds for paving streets and sidewalks



and erecting school buildings. Address The Mayor.

Greensburg, Ky.—Green county will improve roads; contract awarded. Address County Commissioners.

Huntsville, Ala.—City awarded contract for paving Washington and Jefferson streets with vitrified brick to Graves-Matthews Paving Co., Birmingham, Ala., at \$43,420; R. E. Smith, Mayor. (Recently mentioned.)

Jackson, Miss.—City Council has voted to issue \$196,000 of bonds to pave streets and sidewalks, improve water-works and extend sewer system. Address The Mayor. (Recently mentioned.)

Jacksonville, Fla.—City will pave 4th street and Myrtle avenue with vitrified paving blocks. Address The Mayor.

Kansas City, Mo.—Alois M. Kleinboller of Kansas City has contract at \$5000 to grade and macadamize 85th street, distance one mile.

Keyser, W. Va.—City contemplates construction of about one mile paving; Mayor, R. A. Welch.

Lafollette, Tenn.—City awarded contract to Mr. McFarland, Knoxville, Tenn., for grading of Tennessee avenue on Chenoweth Hill and laying concrete sidewalks on principal streets; about \$8000 to be expended.

Long Beach, Miss.—City Council has adopted ordinance for issue of \$10,000 of bonds for improvement and drainage of streets. Address The Mayor.

Louisville, Ky.—L. R. Fligg of Louisville has contract at \$2.46 per square yard for paving 18th street with granite blocks; cost about \$13,000.

Montgomery, Ala.—City Council adopted ordinances providing for various street improvements: paving of Goldthwaite street with asphalt, contract for which was awarded to Memphis Asphalt Co., Memphis, Tenn., at \$8414.14; paving Clayton street; issuance of \$17,000 of bonds for paving sidewalks on Perry street; \$2100 bond issue for sidewalks on Gordon street, and sidewalks on North Decatur and Buford streets.

Muskogee, Okla.—City will expend about \$4,000,000 to construct surface-drainage system for streets, pave 50 miles of streets and concrete sidewalks and other public improvements. Address The Mayor. (See "Water-Works.")

Paducah, Ky.—City will advertise for bids on May 12 for grading and graveling Clark street; L. A. Washington, City Engineer.

Roanoke, Va.—City contemplates issuing \$500,000 of bonds for street improvements. Address The Mayor.

Salisbury, N. C.—City will receive sealed proposals until May 21 on paving lately mentioned; amount to be expended, \$50,000; H. J. Overman, City Clerk. (See "Machinery Wanted.")

Southport, N. C.—Smithville township has voted \$12,000 of bonds for road improvements; W. H. Pyke and J. Berg, members of Road Commission, to supervise construction.

University, Miss.—University of Mississippi, A. A. Kincannon, chancellor, has awarded contract to Funk & Williams, probably of Jackson, Miss., for laying concrete walks on college campus; cost about \$3000.

Washington, D. C.—P. J. Brennan Construction Co., foot of 31st street N. W., Washington, has contract at \$12,000 for paving 1st street N. E.; C. B. Hunt, 1815 M street N. W., Engineer of Highways; Jay D. Morrow, Engineer Commissioner.

Waycross, Ga.—Charlton County Commissioners contemplate bond issue of \$100,000 for improvements to county schools, roads and bridges.

## SEWER CONSTRUCTION

Auburn, Ala.—Alabama Polytechnic Institute, Charles C. Hatch, president, will soon begin construction of sewer system and water-works to cost about \$18,000, under supervision of G. N. Mitcham, professor of engineering. (See "Water-Works.")

Baltimore, Md.—Board of Awards awarded contract to E. J. O'Connell, 158 Adams street, Boston, Mass., at \$187,062 for construction of sections 1 and 2 of east low-level interceptor sewer. Work includes: Section 1—1570 feet 60-inch, 700 feet 57-inch and 980 feet 55-inch brick and concrete sewer and 6250 square yards waterproofing. Section 2—910 feet 52-inch, 858 feet 48-inch and 1500 feet 45-inch brick and concrete sewer and 5325 square yards waterproofing. Calvin W. Hendrick, chief engineer, 904 American Building, Baltimore. (Recently mentioned.)

Baltimore, Md.—Noel Construction Co., U. S. Fidelity & Guaranty Building, Baltimore, has contract at \$298,954 to build substructure and superstructure of East Falls avenue sewer pumping station. Superstructure will

be 188 feet by 156 feet 7 inches; 82 feet in height from top of substructure; brick; granite base; ornamental terra-cotta trimmings; slate roof supported by steel roof trusses; brick chimney 200 feet high; reinforced concrete coal bins. Foundation and substructure will require 24,400 cubic yards excavation, 10,600 cubic yards concrete, 75,000 pounds steel reinforcing bars and 17,000 pounds structural steel. Calvin W. Hendrick, chief engineer, 904 American Building. (Recently mentioned.)

Birmingham, Ala.—City has voted \$400,000 of bonds to build storm and sanitary sewers; \$800,000 to be expended; plans not completed; Julian Kendrick, City Engineer. (Mentioned in February.)

Cape Girardeau, Mo.—City will award contract May 18 for construction of sewer system in Sewer District No. 1; Warren C. Patton, Mayor; Charles F. Betten, City Clerk; C. C. Hawley, City Engineer; this work recently mentioned. (See "Machinery Wanted.")

Clarendon, Ark.—City contemplates voting on \$50,000 of bonds to construct sewer and water systems; organization of improvement district is planned. Address The Mayor.

Decatur, Ga.—H. S. Jaudon, recently noted as engineer in charge of sewer construction, may be addressed Box 582, Savannah, Ga. (Address incorrect in recent notice.)

Fayetteville, N. C.—City has voted \$10,000 for sewer extension; V. C. Bullard, Mayor. (Recently mentioned.)

Fort Saint Philip, La.—Bids on construction of sewer system recently noted will be received until June 15. Address Arthur Cranston, Captain, Quartermaster, U. S. Army, New Orleans, La. (See "Machinery Wanted.")

Jackson, Miss.—City Council has voted to issue \$196,000 of bonds to extend sewer system, improve water-works, streets and sidewalks. Address The Mayor. (Recently mentioned.)

Johnson City, Tenn.—City will construct about 5000 feet trunk sewer and 2000 feet sub-main; bids received until May 28; City Engineer, L. N. Wilson, Jr. (See "Machinery Wanted.")

Louisville, Ky.—Sewer Commissioners, P. L. Atherton, chairman, awarded contract to Ferro-Concrete Construction Co., Cincinnati, Ohio, at \$91,579.64 to construct section "A" of southern outfall sewer. Bids for construction of link in sewer system extending through Cave Hill cemetery will be opened May 27; J. B. F. Breed, chief engineer. (Mentioned in April.)

Maxton, N. C.—City has voted to construct sewer system and water-works; construction work will soon begin under supervision of J. M. Bandy, engineer, Greensboro, N. C.; R. M. Williams, Mayor. (Mentioned in April.)

Moundville, W. Va.—City contemplates bond issue for construction of about 20 miles sewers; plans and specifications not prepared; bids open for engineering work; J. M. Williamson, Mayor.

Pensacola, Fla.—City will extend sewer system now in course of construction; 36-inch brick sewer will be laid on North Spring street. Entire sewer system, for which Mr. Storrie is contractor, is expected to be completed within 90 days; Mr. Hatton, engineer.

Portsmouth, Va.—City contemplates construction of sewers in Fifth Ward and additions to present sewerage pumping station; cost \$110,000; J. Davis Reed, Mayor.

Roanoke, Va.—City is considering issuance of \$100,000 of bonds for sewer construction. Address The Mayor.

Shreveport, La.—Shreveport Water-Works Co. will extend sewer system; estimated cost \$11,023.81.

Wichita Falls, Texas.—Derr & Earley, Oklahoma City, Okla., have contract at about \$29,000 to construct eight and one-half miles of sanitary sewers; John W. Maxcy, consulting engineer, Houston, Texas; T. B. Noble, Mayor. (Recently mentioned.)

Stillwater, Okla.—City has voted \$27,000 public sewer bonds; John L. Bishop, Mayor; C. O. Edgerton, City Clerk. (Recently mentioned.)

## TELEPHONE SYSTEMS

Ada, Okla.—Farmers' Independent Telephone Co. incorporated with \$6000 capital stock by H. M. Parkhurst, J. M. Raney, E. F. Pugh and others.

Evansville, Okla.—Springvale Rural Telephone Co. incorporated by Lee Smith, S. R. Rushey, William Jannon, John Vincent and others, all of Guthrie, Okla.

Hartsville, Tenn.—Home Telephone Co. incorporated by J. H. Rickman, P. E. Burnly, J. B. Johnson and others.

Huntersville, W. Va.—Hills & Brown Creek Telephone Co. incorporated by C. L. Moore,

Coe Beverage, Peter McCarthy, C. K. Moore and others.

Independence, Okla.—Independence Telephone Co. incorporated by J. C. Husted, J. H. Todd, J. L. Goodrich and others.

Sapulpa, Okla.—Farmers' Mutual Telephone Co. incorporated with \$50,000 capital stock by E. E. Coulter, Chaney, Okla.; F. M. Moyer, Alexandria, Okla.; E. M. Smoot, Shattuck, Okla.

Woodlawn, Va.—Galax Mutual Telephone Co. incorporated with \$7395 capital stock; C. D. Dobyns, president; W. C. Winesett, secretary-treasurer.

## TEXTILE MILLS

Anderson, S. C.—Print Cloth.—Anderson Cotton Mills to meet on June 9 to consider increasing capital stock from \$600,000 to \$800,000.

El Paso, Texas.—Woolen Goods.—Chamber of Commerce is negotiating for establishment of woolen mill.

Fort Smith, Ark.—Cotton Goods.—Fort Smith Development Co. is corresponding with manufacturers relative to establishment of cotton mill in new Oklahoma town adjacent to Fort Smith, Ark.

Greenville, S. C.—Cotton Cloth.—Carolina Mills' increase of capital (from \$100,000 to \$200,000) mentioned last week is to cover addition just completed; this addition previously detailed; comprises about 6000 spindles and 176 looms.

Savannah, Ga.—Knit Hosiery.—Savannah Cotton Mills reported to have awarded contract for knitting machinery to be installed in 40x150-foot building, previously reported to be erected. It is understood company will eventually install several hundred machines.

## WATER-WORKS

Auburn, Ala.—Alabama Polytechnic Institute, Charles C. Hatch, president, contemplates soon beginning construction of water-works and sewer system, under supervision of G. N. Mitcham, professor of engineering. It is planned to build pumping station at spring about two miles from school and pipe water to college campus, where standpipe will probably be built. About \$18,000 will be expended. (See "Schools." Previously mentioned.)

Baltimore, Md.—Water Department, Alfred Quick, Engineer, City Hall, will soon begin construction of proposed additional high-service reservoir, to cost from \$500,000 to \$600,000; capacity, 25,000,000 gallons. Specifications have been prepared and proposals will be invited soon. Department also is preparing plans for 20,000,000 storage lake in Gunpowder valley, to include aqueducts, tunnels, large pipe lines, etc., but this work is contingent on vote next fall under enabling act of Legislature, providing for \$5,000,000 loan.

Berlin, Md.—City contemplates installation of water-works, electric light and ice plants; is ready to grant franchises; Orlando Harrison, Mayor.

Bessemer, Ala.—City will purchase local water-works plant; J. E. Rush, Mayor.

Clarendon, Ark.—City contemplates voting on \$50,000 bond issue to construct water-works and sewerage systems. Address The Mayor.

Decatur, Texas.—City has voted \$4200 of bonds to erect steel water tower. Address The Mayor. (Mentioned in April.)

Easton, Ga.—City has awarded contract for construction of sedimentation basin at pumphouse with capacity of 170,000 gallons. Address The Mayor.

Fort Saint Philip, La.—Bids will be received until June 15 on construction of water-works recently mentioned. Address Arthur Cranston, Captain, Quartermaster, U. S. Army, New Orleans, La. (See "Machinery Wanted.")

Galveston, Texas.—City will construct duplicate water main across Galveston bay, for which \$100,000 of bonds were recently noted to have been voted; City Engineer, A. T. Dickey. (See "Machinery Wanted.")

Guthrie, Okla.—City has accepted plans of W. K. Palmer Company, engineers, O. E. Wheelock, business manager, 717 Dwight Building, Kansas City, Mo., for installation of 2,000,000-gallon filtering plant.

Jackson, Miss.—City Council has voted to issue \$196,000 of bonds to improve water-works, extend sewer system and pave streets and sidewalks. Address The Mayor. (Recently mentioned.)

Keyser, W. Va.—City contemplates extensive improvements to water-works system; R. A. Welch, Mayor.

Lancaster, S. C.—H. S. Jaudon, Box 582, Savannah, Ga., is engineer in charge of pre-

liminary work for water-works construction, recently mentioned; \$30,000 to be expended; C. D. Jones, chairman Commissioners.

Ludowici, Ga.—City is reported as considering plans for construction of water-works. Address The Mayor.

Maxton, N. C.—City has voted to construct water-works and sewer systems and will soon begin construction work under supervision of J. M. Bandy, engineer, Greensboro, N. C.; R. M. Williams, Mayor. (Mentioned in April.)

Muskogee, Okla.—City will expend about \$4,000,000 for public improvements, including doubling present water-works system, surface-drainage system for streets, paving 50 miles of streets and concrete sidewalks, and erection of school buildings. Address The Mayor.

Stillwater, Okla.—City has voted \$33,000 of bonds for extension of water-works; John L. Bishop, Mayor; C. O. Edgerton, City Clerk. (Recently mentioned.)

Waurika, Okla.—City will receive bids on material for construction of water-works mentioned in March; engineer, O'Neill Engineering Co., Dallas, Texas; F. W. Anderson, City Clerk. (See "Machinery Wanted.")

## WOODWORKING PLANTS

Atlanta, Ga.—Wood Paving Blocks.—H. W. Dexter, Empire Building, represents manufacturers who contemplate establishing wood paving-block plant; machinery not purchased yet. (See "Machinery Wanted.")

Atlanta, Ga.—Picture Frames.—Binder Frame Manufacturing Co., 85-91 South Forsyth street, will erect four-story factory building containing 35,000 square feet of floor space; additional machinery will be installed. (Recently mentioned.)

Bowling Green, Ky.—Furniture.—Bowling Green Furniture & Manufacturing Co. has increased capital stock from \$15,000 to \$20,000.

Calhoun, Ky.—Handles.—Green River Handle Co. incorporated with \$4000 capital stock by G. W. Atherton, D. S. Smith, W. E. Bender and others.

Huntsville, Ala.—Spokes and Handles.—Beamer Handle Co., W. J. Beamer, general manager, Manor, Pa., has purchased spoke and handle factory in West Huntsville; will make improvements under supervision of C. H. Roberts of Huntsville.

Memphis, Tenn.—Handles.—Rex Handle Co. incorporated with \$75,000 capital stock by M. R. Grace, George A. Neuhardt, J. D. Browne and others.

New Orleans, La.—Furniture.—The Dover & Hoffman Company incorporated with \$10,000 capital stock; A. Di Maggio, president; Gus Hoffman, vice-president and manager; Herman Dover, secretary-treasurer.

Selma, Ala.—Staves.—Dixie Stave Co., recently reported incorporated with \$15,000 capital stock by A. R. Tichnor and others, will establish stave mill at Selma with daily capacity of 20,000 staves; offices will be at Louisville, Ky.

Shreveport, La.—Fancy Woodwork.—Colonial Manufacturing Co., Charles B. Clark, president, Abingdon, Va., is considering establishment of plant in Shreveport to manufacture colonial building post and fancy woodwork.

Washington, N. C.—Staves.—Atlantic Manufacturing & Stave Co. incorporated with \$50,000 capital stock by R. G. Moss of Washington, Merdant Etheridge, Norfolk, Va.; C. T. Hobart and J. H. Watkins, Lima, Ohio.

## BURNED

Alexandria, La.—Simms Lumber Co.'s saw-mill; loss about \$50,000.

Alexandria, Va.—T. F. Burroughs' Son & Co.'s mill and store building; loss about \$40,000.

Atlanta, Ga.—Inman Block and Terminal Hotel, owned by Samuel M. Inman, loss \$400,000; Harry L. Schlesinger's candy factory, loss \$200,000; Liquid Carbonic Co.'s plant, loss \$150,000; Atlanta Brewing & Ice Co.'s plant, loss \$60,000; Dabney H. Scoville's hotel, loss \$50,000; McClure Ten-Cent Co.'s store building, loss \$25,000; Schlesinger-Meyer Baking Co.'s bakery, loss \$20,000; Georgia Vehicle Manufacturing Co.'s plant, loss \$20,000; West Disinfecting Co.'s building, loss \$15,000; Piedmont Hat Manufacturing Co.'s factory, loss \$14,000; Couch-Elder Manufacturing Co.'s overall factory; Southern Handkerchief Manufacturing Co.'s plant; Southern Suspender Works; Marion Hotel; Keystone Type Foundry Co.'s plant; J. J. Goodrum Tobacco Co.'s plant; Robinson Neckwear Co.'s building; Walker-Cooley Furniture Co.'s building, and others; total loss estimated at \$1,250,000.

Atlanta, Ga.—Piedmont Stable Co.'s buildings and others; loss \$100,000.

Baltimore, Md.—John N. Kunkel & Sons' wagon factory at 31-39 East Lee street; loss about \$15,000.

Blodgett, P. O. Leesburg, Texas.—S. G. Greer's sawmill; loss about \$5,000.

Charles Town, W. Va.—C. L. Robinson & Co.'s ice plant; loss about \$25,000.

Elberton, Ga.—Swift Cotton Mills' dyeing plant; loss about \$20,000.

Houston, Texas.—Ed C. Smith's building, damaged; loss on structure \$8000.

Key West, Fla.—Cortez Cigar Co.'s factory.

New Orleans, La.—Building owned by New Orleans Real Estate, Mortgage & Securities Co. and occupied by F. F. Hansell & Bro., Ltd., loss \$125,000; building owned by Tulane Educational Fund and occupied by H. B. Stevens & Co., Ltd., loss about \$90,000; building occupied by G. Moses & Son and owned by parties represented by A. & C. Denis, loss \$10,000; building owned by C. C. Cordill and occupied by Jules Dreyfuss Company, loss \$45,000.

Paducah, Ky.—Ferguson Waterproofing Co.'s plant; loss \$6,000.

Piper, Ala.—Little Cahaba Mining Co.'s tiple and boiler-house; loss \$10,000.

Sumral, Miss.—J. J. Newman Lumber Co.'s machine and repair shops; loss estimated at \$15,000.

## BUILDING NOTES APARTMENT-HOUSES

Baltimore, Md.—William A. Foreman, 1919 Kennedy avenue, is preparing plans for apartment-house at St. Paul and Lanvale streets; five stories, 20x55 feet; front of Roman pressed brick, trimmed with Indiana limestone; steam heat; electric lights.

El Reno, Okla.—B. E. Gilmore will erect apartment-house: two stories; brick; 52 rooms; eight apartments of seven or eight rooms each, with private baths; furnace heat; laundry and storage-rooms in basement. Plans have been prepared and contract will soon be awarded.

Kansas City, Mo.—W. W. Arnold will erect two apartment-houses; six apartments; 40x42 feet; three stories; estimated cost \$12,000.

New Orleans, La.—Albert Aschaffenburg, 821 Baronne street, awarded contract to Ferro-Concrete Construction Co., Cincinnati, Ohio, for erection of apartment-house recently mentioned; four stories, 100x60 feet; ferro-concrete construction throughout; plans by Mackenzie & Biggs, New Orleans; E. Weil, New Orleans, associate architect.

Richmond, Va.—Gilbert Weldon, 1625 West Grace street, awarded contract to Thos. D. Newell, Richmond, for erection of apartment building recently mentioned (under Residences); 28x103 feet; brick; metal roof; two stories; flat on each floor; hot-water heating; gas and electric lighting; cost \$10,650; plans by W. B. Newell, Richmond.

Tulsa, Okla.—T. B. Bliss will erect two-story brick apartment-house to cost \$9,000.

Washington, D. C.—John L. Warren, Columbian Building, 416 5th street N. W., has had plans prepared by Hunter & Bell, 1010 F street N. W., Washington, for apartment-house at 2109 18th street N. W.; brick; four stories; cost \$40,000.

## BANK AND OFFICE BUILDINGS

Bay City, Texas.—I. Ditch will erect two-story brick department store and office building. (See "Miscellaneous Structures.")

Bennington, Okla.—First State Bank (E. F. Rines, T. L. Cox and J. R. McKinney) will erect two-story brick bank building.

Big Stone Gap, Va.—J. A. L. Minor will erect office building; three stories; silica brick.

Ganado, Texas.—Citizens' State Bank building, recently mentioned, will be of brick construction; for bank and stores; 70x90 feet; mill construction; gas lighting; cost \$15,000; plans by Bailey-Mills Company, Victoria, Texas; contract let May 7.

Chattanooga, Tenn.—First National Bank, Chas. A. Lyerly, president, will remodel interior of bank building at cost of probably \$10,000; plans by Donn Barber, 24 East 23d street, New York.

Denham Springs, La.—State Bank, W. I. Cockerham, president, will erect bank building.

Houston, Texas.—J. O. Ross will erect two-story brick store and office building. (See "Miscellaneous Structures.")

Houston, Texas.—Harris County Savings Bank awarded contract to Mr. Heidelberg,

care of architect, for erection of bank building recently mentioned; plans by A. Dellele, Houston; building 50x90 feet; two stories; pressed brick; gas and electric lighting; cost \$9,000; bank, drug store and offices.

New Orleans, La.—Julius Wels, 835 Gravier street, will erect four-story office building, for which plans were recently noted to be prepared by Favrot & Livaudais, Ltd., 839 Gravier street, New Orleans; building 64x110 feet; brick and terra-cotta; ordinary construction; steam heat; electric lighting; electric elevators; cost \$40,000; date of opening bids not decided.

Oklahoma City, Okla.—N. F. Gates of Oklahoma City and P. L. Bassett, El Paso, Texas, are planning to build office structure; eight stories; fireproof construction; 74x141 feet; estimated cost \$250,000.

Swainsboro, Ga.—Bids will be opened for erection of bank and office building; plans and specifications furnished on application to A. D. Coleman, president.

Tampa, Fla.—Bonfoey & Elliott of Tampa are preparing plans for office building; seven stories; 100 feet square; roof garden.

Tulsa, Okla.—Charles W. Bliss, Muskogee, Okla., will erect office building; four stories, 50x75 feet; reinforced concrete faced with Roman brick and trimmed with marble; cost about \$50,000; plans by J. J. Glandfield of Tulsa.

Washington, D. C.—Stone & Fairfax, 1342 New York avenue N. W., have sold site 22x130 feet at 623 F street, on which purchasers propose to erect office building.

## CHURCHES

Alexandria, La.—Synagogue recently noted to be erected by Congregation Gemiluth Chassodim will be of ordinary construction; 60x90 feet; steam heat; electric and acetylene gas lighting; cost \$32,000; plans by Keenan & Weiss, New Orleans, La.; contract to be awarded May 22; Leonard J. Rothstein, rabbi, Box 92, Alexandria.

Amite City, La.—Methodist Church will erect edifice to replace structure recently destroyed by cyclone; frame; cost about \$5,000; A. G. Cook, chairman of committee to select plans and specifications, desires correspondence with architects and contractors.

Baltimore, Md.—Sacred Heart congregation awarded contract to Thomas O'Reilly, 1616 Thompson street, Philadelphia, Pa., to erect edifice at Third and Canton avenues, Highlandtown; plans by R. C. Ullrich, 1516 Highland avenue, Highlandtown. (Recently mentioned.)

Clarksville, Va.—Bids will be opened May 20 for erection of brick church building; plans and specifications on file with Henry Wood, chairman Building Committee.

Greenwood, Miss.—Building Committee First Baptist Church will receive sealed bids until June 4 on erection of proposed brick and cement edifice; cost \$25,000; plans by C. W. Bulger & Son, Dallas, Texas; separate bids received on plumbing and lighting. Address E. E. Bell, secretary.

Raspeburg, Md.—Episcopal congregation has begun erection of proposed edifice; concrete construction; 30x65 feet; cost \$25,000; at present only basement will be built, and will be covered by temporary roof; later rectory will be built; Rev. S. H. Orrick, 216 West Madison street, Baltimore, is in charge.

Savannah, Ga.—Hebrew Congregation Agudas Achim, A. Buschbaum, president, has purchased site, 120x90 feet, on which to erect synagogue costing about \$30,000.

St. Louis, Mo.—North Presbyterian Church will open bids May 20 for erection of brick edifice recently mentioned; steam heat; electric and gas lighting; cost \$30,000; plans by W. A. Cann, 1023 Missouri Trust Building, St. Louis.

Waynesboro, Va.—Presbyterian Congregation will erect edifice to cost \$15,000. Address The Pastor, Presbyterian Church.

## COURTHOUSES

New Albany, Miss.—Union County Board of Supervisors adopted plans by F. M. Dobson & Co., Montgomery, Ala., for courthouse; \$65,000 of bonds will be issued.

Sanford, N. C.—Board of Commissioners, Lee county, will receive bids until May 25 at office, Sanford, for erection of courthouse and combined jail and jailer's residence; information obtainable from J. J. Edwards, chairman, Lemon Springs, N. C., or A. A. F. Seawell, County Attorney, Sanford. (Mentioned in April.)

## DWELLINGS

Anderson, S. C.—J. Dexter Brown has had plans prepared by J. H. Casey of Anderson

for residence to cost \$10,000 to \$15,000 to replace burned structure.

Baltimore, Md.—Frank Novak of Novak & Hirt, 2800 Jefferson street, has contract to erect 18 dwellings on Port street; two stories; 12x42 feet; cost \$14,800.

Baltimore, Md.—St. Paul Realty Co., 301 St. Paul street, will erect 14 dwellings, 15x55 feet; ordinary construction; steam heat; gas and electric lighting; cost \$40,000; plans by John R. Forsythe, Baltimore. (Recently noted to be erected by Gilbert & Doyle.)

Baltimore, Md.—William A. Davidson, 3614 Cedar avenue, has had plans prepared by Jacob F. Gerwig, Vansant Building, 210 East Lexington street, for two-story dwellings, to cost \$20,000.

Baltimore, Md.—William H. Emory, Jr., Professional Building, Baltimore, has prepared plans for suburban residence; 37x34 feet; stone foundation; exterior of shingles; two and one-half stories; porches on three sides; bathroom; cost \$5,000.

Baltimore, Md.—A. S. Mylander & Bro., 525 Law Building, owners, will erect three two-story dwellings recently mentioned; plans by Jacob Gerwig, Van Sant Building, 210 East Lexington street, Baltimore; steam heat; electric and gas lighting; cost \$6,000.

Beaumont, Texas.—J. E. Broussard will erect residence recently mentioned at cost of \$15,000; frame; hot-air heating; electric lighting; slate roof; architect, H. C. Mauer, Beaumont; contractor, A. Ballin, Beaumont. (See "Machinery Wanted.")

Bessemer, Ala.—Tennessee Coal, Iron & Railroad Co., F. H. Crockard, general manager, Birmingham, Ala., will not erect 350 dwelling-houses for employees; recently incorrectly reported.

Charlotte, N. C.—F. C. Abbott contemplates erection of dwelling at Colonial Heights; plans not made; architect not selected.

Chattanooga, Tenn.—Jos. Trimby, Room 17 News Building, had plans prepared by R. H. Hunt, Chattanooga, for erection of residence recently mentioned; building 60x70 feet; hot-water heating; gas lighting; cost \$10,000.

Columbia, S. C.—John F. Mallard will erect residence at Colonial Heights; two stories; brick veneer; eight rooms.

Columbia, Tenn.—H. F. Alexander awarded contract to Vaughn Manufacturing Co., Columbia, for erection of residence recently mentioned; plans by A. E. Mauler, Nashville, Tenn.; two-story building; concrete block; six rooms; hot-water heating; electric lighting; cost \$5,000. (See "Machinery Wanted.")

Covington, Ky.—E. H. Glerach awarded contract to Henry Hellman, Covington, for erection of residence recently mentioned; plans by Lyman Walker, Covington; two stories; pressed brick; cement porch; slate roof; hot-air heating; gas and electric lighting; cost \$4,000 to \$5,000.

Crossville, Tenn.—J. R. Mitchell will erect residence to cost within \$5,000; ordinary construction; heating not decided; acetylene-gas lighting; architect not selected.

Hobart, Okla.—N. Fenstermaker awarded contract to L. E. Sparks to erect residence; two stories, 36x44 feet; 12 rooms; steam heat; electric lights; hot and cold water; cost \$5,000.

Montgomery, Ala.—A. J. Keynton & Co. will construct two dwellings recently noted to be erected by A. J. Keynton; frame; two-story; nine rooms; fireplaces; cabinet mantels; electric lighting; cost \$4,000 each. (See "Machinery Wanted.")

Mount Washington, Station Baltimore, Md. Thomas B. Ewalt, 704 Lennox street, Baltimore, will erect residence on Rodgers avenue, Mount Washington; two and one-half stories, 30x42 feet; porches on three sides; exterior of shingles; slate roof; 15 rooms; plans by Mottu & White, 611 Professional Building, Baltimore. Contractors estimating: William Ferguson & Bro., 214 Clay street; John Cowan, 106 West Madison street; Willard E. Harn, 2700 Huntingdon avenue; T. B. Stanfield & Son, 109 Clay street; Ignatius Smith, 1719 Liberty road; A. F. West, 217 South Gilmor street; all of Baltimore.

Norfolk, Va.—R. C. Marks awarded contract to Myers-Turpin Construction Co. of Norfolk to erect two double dwellings, 42x90 feet; ordinary construction; hot-air heating; electric lighting; cost \$18,000; B. F. Mitchell of Breeze & Mitchell, Atlantic Trust Building, Norfolk, architect.

Norfolk, Va.—Harry Hoffheimer will erect residence in Ghent to cost between \$15,000 and \$20,000; Neff & Thompson, Atlantic Trust Building, Norfolk, are architects.

Norfolk, Va.—W. T. Phillips, 24 Commerce street, awarded contract to J. D. Anders, Norfolk, for erection of five dwellings; brick

and stone; 16x69 feet; hot-air heat; electric and gas lighting; cost \$23,000; plans by Benjamin F. Mitchell, Seaboard Bank Building, Norfolk.

Oklahoma City, Okla.—J. S. Alexander awarded contract to C. A. Ryno, Oklahoma City, for remodeling of six-story structure recently reported purchased.

Radford, Va.—Virginia Iron, Coal & Coke Co., Bristol, Va.-Tenn., will erect two residences in Radford for Henry K. McHarg and E. E. Vaughan. Mr. McHarg is president of company; New York offices, 40 Wall street.

Richmond, Va.—R. M. Brander contemplates erection of residence in Ginter Park.

Richmond, Va.—P. C. Christian will erect brick residence to cost \$3,000; Joseph Heye of Richmond, contractor.

Spotsylvania, Va.—T. Stokeley Coleman awarded contract to E. G. Hedlin, Fredericksburg, Va., for erection of residence to cost \$5,000; colonial style; ordinary construction; plans by Mr. Hedlin.

St. George, S. C.—Dr. J. B. Johnson will erect \$10,000 residence; classic colonial style; plans are being prepared by C. Gadsden Sayre & Co., Payne Building, Anderson, S. C.

St. George, S. C.—Dr. J. B. Johnson is having plans prepared by C. Gadsden Sayre & Co., Anderson, S. C., for residence to cost about \$10,000.

Washington, D. C.—Marsh & Peter, 520 13th street N. W., Washington, have completed plans for residence to be erected on Wyoming avenue by Aldis B. Browne, 1525 P street N. W.; structure will be 32x57 feet, with extension 20x30 feet in rear; three stories and basement; colonial style; red brick, in Flemish bond, with white stone work; 20 rooms, including five bathrooms; cost \$20,000; L. H. Emmert, 1110 15th street N. W., contractor.

Washington, D. C.—Richard C. Adams, 232 Bond Building, has, it is reported, purchased site at \$40,000 and is having plans prepared for residence.

Washington, D. C.—Harriet T. Galt of William M. Galt & Co., Indiana avenue and 1st street N. W., will erect residence on Delaware street N. W.; two stories; brick; estimated cost \$7,500; plans by Albert H. Beers, 717 14th street N. W., Washington.

Washington, D. C.—John H. Fisher, Southern Securities & Development Co., 1206 G street N. W., will erect two-story frame dwelling, costing \$5,000, at 426 Rittenhouse street.

Washington, D. C.—George S. Cooper, 1413 G street N. W., will erect three-story brick dwelling at 1910 S street N. W.; estimated cost \$9,000; plans by Mr. Cooper; John Kirby, 1235 Maryland avenue N. E., Washington, contractor.

## HOTELS

Atlanta, Ga.—Samuel M. Inman is planning to erect hotel to replace the Terminal Hotel recently burned; new structure probably five or seven stories high, and will contain 100 rooms.

Atlanta, Ga.—Atlanta Brewing & Ice Co., Albert Steiner, president, will rebuild Marion Hotel Annex, operated by Dabney H. Scoville.

Baltimore, Md.—Hotel Belvedere Co. plans to build addition, 24x184 feet, two stories high, with basement; architects Parker, Thomas & Rice, 1109 Union Trust Building.

Big Stone Gap, Va.—Home Hotel Co. awarded contract to Charles Johnson of Big Stone Gap to erect hotel and office building, 142x132 feet; three stories; pressed brick; stone trimmings; structural steel work; concrete floors; plans by Holmboe & Lafferty, Clarksburg and Bluefield, W. Va. (Recently mentioned.)

Durham, N. C.—A. J. Ellis will make improvements to Hotel Murray; 30 rooms to be added; ordinary brick construction; stone trimmings; steam heat for 50 rooms; gas and electric lighting; cost \$11,500; plans by O. F. Wilkinson, Durham. (Recently mentioned.)

Flomaton, Ala.—Flocambia Hotel Co. will be incorporated with \$30,000 capital stock to rebuild burned Flocambia Hotel; new structure will be 200x90 feet; two stories and basement; fireproof; cement-block and steel construction; six bathrooms; plans and specifications have been prepared.

Hot Springs, Ark.—George Callihan of Hot Springs Plumbing & Machine Co., Hot Springs, has contract to place \$35,000 worth of lavatories and bathroom fixtures in Eastman Hotel. Each room will be provided with hot and cold water.

Jacksonville, Fla.—R. W. Simms awarded contract to T. Y. Baker of Jacksonville to erect Hotel Albert; four stories, 100x72 feet; mill construction; white brick; first floor entirely of stone; ornamental arched open-



ings of stone; 85 rooms; telephone exchange; steam heat; electric lighting; electric passenger elevator; private baths; cost \$25,000; W. B. Camp of Jacksonville has prepared plans; James R. Walsh of Jacksonville, supervising architect. (Mentioned in March.)

Kansas City, Mo.—James A. Wirthman will remodel building as hotel and erect brick addition; cost \$16,000.

Sparks, Ga.—S. Harrell, Valdosta, Ga., will erect hotel for summer and winter resort; plans not made; construction by owner. (Recently noted under Valdosta, Ga.)

Staunton, Va.—Ernest M. Harman will, it is reported, expend \$10,000 to improve Hotel Eakleton.

St. Louis, Mo.—Southern Hotel will erect addition to cost \$20,000.

Tip Top, Va.—Baker & Wells, Graham, W. Va., have, it is reported, contract to erect hotel near Tip Top.

### MISCELLANEOUS STRUCTURES

Atlanta, Ga.—Business Building.—Mrs. Henrietta Cooper contemplates erecting three-story brick business building.

Atlanta, Ga.—Business Building.—George McCarty will erect building to replace burned structure.

Bay City, Texas—Store Building.—Dr. P. E. Parker and Mr. McClennan will erect store building 62½x100 feet; one-story; brick; cost \$6000; plans and construction by Thos. Howard, Bay City.

Bay City, Texas—Stores.—V. L. LeTulle will erect one-story brick store building; 50x100 feet; cost \$4500; plans by Page & Bro., Austin, Texas; contractor, Thos. Howard, Bay City.

Bay City, Texas—Store Building.—I. Ditch will erect business building; lower floor, department store; offices above; two stories; brick; 150x50 feet; architect, J. E. Large, Bay City; bids to be opened about June 1.

Bessemer, Ala.—Postoffice.—Alfred Struck Company, Louisville, Ky., has contract at \$47,940 to erect U. S. postoffice at Bessemer; James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C. (Recently reported award incorrect.)

Big Stone Gap, Va.—Store Building.—Big Stone Gap Jewelry Co. awarded contract for erection of building; two stories, 25x50 feet; concrete blocks.

Biloxi, Miss.—Sanatorium.—Biloxi Sanatorium (Gulf Coast Health Resort) awarded contract to T. J. Rosell Manufacturing Co., Biloxi, for erection of 20-room annex recently mentioned (under "Hotels"); fireproof roof; steam heat; electric lighting; hand elevator; cost \$6000; plans by J. E. Hebert.

Birmingham, Ala.—R. E. Collins, Frank S. White and Leo K. Steiner will each erect business building; three stories and basement; fireproof; total estimated cost, \$75,000; plans by Joy & Wheelock of Birmingham; joint contract will be awarded.

Catonsville, Station Baltimore, Md.—Clubhouse.—Catonsville Country Club awarded contract to Henry A. Nagle of Catonsville to erect clubhouse, recently mentioned; frame; two stories, 100x37 feet; steam-heating plant to furnish heat and warm water; cost about \$10,000; plans by Walter M. Gieske, Edmondson avenue, Catonsville.

Charleston, S. C.—Building.—South Carolina Military Academy awarded contract to Henry Zacharias of Charleston at \$13,678 for remodeling police barracks into proposed annex of citadel; dormitories, officers' quarters, etc., to be provided for; hot-water heating system. (Recently mentioned.)

Cookeville, Tenn.—Store Building.—S. Pincus will probably award contract to Joe Scott for erection of brick store building recently mentioned; plans by Mr. Scott; two-story building, 29½x39½ feet; electric lighting; cost \$7500. (See "Machinery Wanted.")

Cuba, P. O. Millington, Tenn.—Hall.—Bids are invited for erection of Masonic Hall; plans and specifications on file with George W. Pryor & Son, Porter Building, Memphis, Tenn.; certified check, \$50; J. A. Hassell, E. B. Pennington and others, committee in charge.

El Reno, Okla.—Business Building.—J. H. Garvey, Geary, Okla., will award contract in about 30 days for erection of two-story business building recently mentioned; 50x100 feet; ordinary construction; electric lighting; cost \$10,000; architect not specified.

Fort Monroe, Va.—Wharfhous.—J. H. Brinson, Hampton, Va., is lowest bidder at \$13,740 to build wharfhous on Old Point dock; C. T. Taylor is lowest bidder at \$411 for plumbing and \$1895 for heating; S. J. Watson lowest bidder at \$598.93 for electrical work; both of Hampton, Va.

Galveston, Texas—Bathhouse.—Surf Bathing Co. (Incorporated by J. H. Langbehn, W. F. Turnley and others) awarded contract to Bowden & Worth of Galveston to erect bathhouse on beach; two stories, 225x120 feet; removable windows to constitute east, south and west sides; three glass archways; first floor to contain 300 bathrooms, laundry, drying galleries, etc.; second floor to have vaudeville theater, auditorium having seating capacity of 1000; electric lighting; estimated cost, \$35,000. (Mentioned in April.)

Ganado, Texas—Store Building, etc.—Citizens' State Bank will erect bank and store building. (See "Bank and Office Buildings.")

Greensboro, N. C.—Stable.—C. D. Wilkerson will erect two-story brick livery stable 50x100 feet.

Greensboro, N. C.—Store Building.—H. T. Ham will erect store building; brick; 55x85 feet; two stories; lower floor, storerooms; second floor, lodgerooms.

Griffin, Ga.—Business Building.—W. J. Kincaid will erect building; two stories; brick; 44x100 feet; contract awarded to Gresham Manufacturing Co. of Griffin.

Hampton, Va.—Y. M. C. A. Building.—C. T. Holtzclaw of Hampton is lowest bidder for erection of Young Men's Christian Association building; bid on main building, \$6678; gymnasium, \$2100; steam heating, \$1665; bowling alley, \$1217, and running track, \$275; total, \$11,992. Plans, prepared by Holtzclaw Bros. of Hampton, may be changed to bring cost within estimate of \$10,000; R. Walter Lynch, secretary of association. (Recently mentioned.)

Houma, La.—Store Building.—Alex. P. Haddad awarded contract to A. A. Bonville of Houma to erect brick store building.

Houston, Texas—Store and Offices.—J. O. Ross will erect two-story brick store and office building; 100x100 feet; architect, A. Delisle, Houston; excavation started; contract not awarded.

Houston, Texas—Clubhouse.—H. M. Garwood, C. D. Golding and others are planning organization of country club, and contemplate erecting clubhouse to cost \$25,000.

Jackson, Miss.—Hospital.—State Hospital for Insane will award contract May 20 for building galleries around negro wards and dormitories and for heating apparatus; cost not to exceed \$12,500; plans and specifications on file.

Key West, Fla.—Buildings.—Bureau of Yards and Docks, R. C. Hollyday, chief of bureau, Navy Department, Washington, D. C., is having plans prepared for buildings at naval station, Key West; shop building, 65x180 feet; 30-foot central longitudinal space served by traveling crane; mezzanine floors along sides; foundations of concrete and piles; steel frame; ends of roof of expanded metal plastered; also for storehouse building, 54x112 feet; two stories, with two mezzanine floors; floors of concrete and piles; fireproof steel girders; structural steel and concrete columns; concrete-block walls; steel roof trusses and tile roof.

Leesville, La.—Jail.—W. C. Whitney, Beaumont, Texas, has contract to erect parish jail at Leesville to cost \$17,000; plans by C. H. Page, Jr., & Bro., Austin, Texas.

Lexington, N. C.—Jail.—W. P. Rose of Rose & Weston, Greensboro, N. C., has prepared plans for jail at Lexington.

Memphis, Tenn.—Fair Buildings.—Tri-State Fair Association awarded contracts to Pritchard Bros. of Memphis to erect five exhibits buildings—main exhibition hall, 70x200 feet, two stories; manufacturers' building, 70x150 feet, one story; machinery building, 70x150 feet, one story; vehicle building, 60x200 feet, one story; implement building, 60x200 feet, one story; combined floor space, about 75,000 square feet; cost, including heating, wiring and plumbing, about \$25,000; contracts call for completion within 90 days. (Previously mentioned.)

New Orleans, La.—Government Building.—Penn Bridge Co., Beaver Falls, Pa., has contract for proposed building for quartermaster's department at Southwest Pass, New Orleans, and will furnish all material; cost, about \$12,000.

Oklahoma City, Okla.—Business Building.—C. H. Terwilliger, Brookfield, Mo., will, it is reported, erect brick business building costing \$30,000.

Oklahoma City, Okla.—Business Building.—J. M. Owen and Richard A. Vose will erect building; seven stories; enamel faced brick; marble wainscoting; tile flooring; cost about \$100,000; contract for reinforced steel work awarded.

Owingsville, Ky.—Store and Lodge.—Hall Company, Dr. H. J. Dally, president, will erect two-story building; first floor, store; lodgeroom on second floor; 28x65 feet; ordinary brick construction; electric lighting;

cost \$3000. B. A. Shroat, Owingsville, Ky., R. F. D. No. 2, may be addressed. (See "Machinery Wanted.")

Parkersburg, W. Va.—Grandstand.—West Virginia Fair Association awarded contract to Flinn Construction Co. of Parkersburg at \$10,900 to construct grandstand for fair grounds.

Reisterstown, Md.—Hospital.—Jewish Home for Consumptives, Louis H. Levin, secretary, will erect memorial cottage for tuberculosis patients; 75x34 feet; weathered shingles, stucco and half timber; one story; social hall and eight patients' rooms, each 12x14 feet; porch, 100 feet long; Charles M. Anderson, 324 North Charles street, Baltimore, has prepared plans. Bids will be submitted by Thomas P. Johns, 1514 Harford avenue; Monmonier & Sorrell, 308 Laurens street; Gladfelter & Chambers, 2072 Woodberry avenue; John Cowan, 106 West Madison street.

Rockville, Md.—Masonic Temple.—Masonic Building Association contemplates erection of three-story building with steam heat and electric lighting; cost from \$6000 to \$10,000. Dr. G. E. Lewis may be addressed.

Savannah, Ga.—George H. Miller is considering erection of three-story brick building, 60x100 feet, costing about \$40,000; first floor for stores, second for offices, and third for stag hotel.

Savannah, Ga.—Stores.—C. H. Schroder has purchased dwelling 120x50 feet, and will expend about \$15,000 in improvements, including building of store under building and four other stores adjoining.

St. George, S. C.—Masonic Temple.—Dr. J. B. Johnson, chairman committee, is receiving bids for proposed Masonic Building; 42x80 feet; plans by C. Gadsden Sayre & Co., Payne Building, Anderson, S. C.

St. George, S. C.—Temple.—C. Gadsden Sayre & Co., Anderson, S. C., have completed plans for Masonic Temple at St. George; 42x80 feet; bids are being received; Dr. J. B. Johnson, chairman of Building Committee.

St. Louis, Mo.—Building.—H. W. Beardsley of St. Louis has prepared plans for erection of "Ye Old English Inn" on property of Wm. H. Miltenberger. Structure will be two stories, with basement for storage purposes; heating and lighting plants; rough red brick to second floor, and above of plaster in panels; 50x100 feet; old English half-timber style of architecture; red tile roof, supported by steel trusses. Restaurant will have red tile floor and finished in mahogany; cost about \$50,000.

St. Louis, Mo.—Commercial Building.—Altoona Investment Co. will erect commercial building; six stories, 35x100 feet; finished in light-buff brick and trimmed with terra-cotta; electric elevators; cost \$100,000; H. F. Roach, 721 Olive street, St. Louis, has completed plans and will supervise erection. (Recently mentioned.)

St. Louis, Mo.—Stores and Hall.—C. P. Abern and Herman Albert awarded contract to E. L. Wagner Construction Co. for erection of dancing academy recently mentioned; plans by John D. Paulus, St. Louis; building 55 feet 3 inches by 134 feet 8 inches, two stories; first floor, stores; second floor, dancing hall; ordinary construction; steam heat; gas and electric lighting; cost about \$30,000. (See "Machinery Wanted.")

Vicksburg, Miss.—Store Building.—Valley Dry Goods Co. will, it is reported, erect five-story department store building.

Washington, D. C.—C. D. Fowler will erect store and dwelling at 1534 to 1538 7th street N. W.; two stories; brick; estimated cost \$14,000; plans by A. P. Clark, Jr., 606 F street N. W.; Piper & Kenyon, 729 15th street N. W., contractors; both of Washington.

Wheeling, W. Va.—Stable.—Louis Steenrod will have plans prepared by Gleser & Faris of Wheeling for stable; four stories, 33x122 feet; steel frame; gas and electric lighting; water-power elevator.

Wilmington, N. C.—Store Building.—T. W. Wood awarded contract to R. H. Brady of Wilmington to erect store building; brick; two stories, 20x70 feet; plate-glass front; electric lighting; cost \$4000; plans by L. A. H. Koeth, Wilmington.

Winchester, Ky.—Lodge Building.—Knights of Pythias and Lodge of Masons will erect store, lodge and office building; three stories; cost about \$15,000.

Winston-Salem, N. C.—Orphanage.—Western North Carolina Conference of Methodist Episcopal Church has selected site of 165 acres on which to erect proposed orphanage; structures to be erected at present will be main building, administrative and with dormitories, to cost between \$18,000 and \$25,000, and superintendent's home. Special committee is composed of Dr. G. H. Detwiler, Greensboro, N. C.; S. L. Rogers, Franklin,

N. C.; J. A. Glenn, Charlotte, N. C., and others.

### MUNICIPAL BUILDINGS

Baltimore, Md.—Jail.—Municipal Architectural Commission adopted plans by Theodore Wells Pietsch, American Building, Baltimore, for extension, remodeling and improvements to City Jail; 275 cells; cost about \$150,000. (Recently mentioned.)

Catonsville, Station Baltimore, Md.—Police Station.—Schatz Bros. of Catonsville have contract to build police station.

Jackson, Tenn.—City Hall.—City will vote June 2 on \$25,000 bond issue for erection of City Hall. Address The Mayor.

Oxford, N. C.—Building.—City will erect building; brick; two stories, 50x50 feet; 30x80 feet of ground floor for fire department, and 20x80 feet for Mayor's office and prison; cost \$5100; contractor, W. C. Lineberry of Oxford.

Roanoke, Va.—City Hall.—City is considering issuing \$201,000 of bonds for City Hall. Address The Mayor.

### SCHOOLS

Appomattox, Va.—City will erect school building to cost \$10,000. Address The Mayor.

Auburn, Ala.—Alabama Polytechnic Institute, Charles C. Thatch, president, has adopted preliminary plans for agricultural building to cost about \$75,000, and contemplates advertising for bids. Birmingham Building & Construction Co., Birmingham, Ala., contractor, has begun foundation work on new library to cost about \$30,000; W. F. Feagin, secretary building committee. (See "Water-Works." Previously mentioned.)

Charlotte Court House, Va.—City will erect school building recently mentioned; two stories, with basement; seven rooms; brick; hot-air heating; cost \$7000; plans by Chas. M. Robinson, Richmond, Va.; contractor, Haynes Bros., Whitesides Depot, Va.

Charleston, S. C.—South Carolina Military Academy awarded contract to H. T. Zacharias, Charleston, for remodeling and repairs to three-story brick school building for men's hall, officers' quarters, infirmary, etc.; ordinary construction; hot-water heating; electric lighting; hand-power elevator; kitchen equipment; cost of remodeling, etc., \$20,000; Todd & Benson, Charleston, architects.

College Park, Md.—Maryland Agricultural College is considering plans for engineering building, for which \$30,000 has been appropriated.

Creedmoor, N. C.—City is having plans prepared by H. C. Lathicum, Durham, N. C., for school building at Creedmoor; brick; five rooms and auditorium; cost \$8000. (Recently mentioned.)

Fort Monroe, Va.—George A. Fuller Company, Munsey Building, Washington, D. C., has contract to erect officers' and enlisted men's school buildings at Fort Monroe at \$113,000 and \$47,000, respectively; plans by F. R. Wheaton, 2406 18th street N. W., Washington, D. C. (Full details recently mentioned.)

Fort Worth, Texas.—City has voted \$150,000 of bonds to erect school buildings and improve streets and sidewalks. Address The Mayor.

Franklin, Ky.—City will vote May 12 on \$18,000 bond issue for erection of school building. Address The Mayor.

Gallatin, Mo.—City will vote on bond issue for erection of school building. Address The Mayor.

Galveston, Texas.—City's school improvements, for which \$50,000 of bonds were recently reported voted, will include raising of two large brick buildings five or six feet and installing heating apparatus in same buildings; I. Lorenberg, president of School Board.

Greensboro, Ga.—City will open bids June 1 to erect school building; plans and specifications furnished by C. Gadsden, Sayre & Co., Anderson, S. C.; J. H. McWhorter, clerk of council.

Hixson, Tenn.—Hamilton County and High School Boards of Education have accepted plans by Adams & Alsop, Chattanooga, Tenn., for school building at Hixson; two stories; pressed brick; classrooms on first floor, 23x32 feet; study hall, 51x66 feet; two laboratories, 14x18 feet, etc., on second floor; cost \$16,000. (Mentioned in April.)

Houston, Texas.—Massey Business College has had plans prepared for building; brick, stone and steel; three stories, 50x100 feet; plate-glass front for first floor; cost \$25,000.

Lawton, Okla.—D. K. McLeod, Cedar Rapids, Iowa, has contract to erect Fifth Ward school building, to cost \$18,500.

Louisville, Ky.—Presbyterian Seminary of Kentucky will erect east wing of unfinished

seminary rectangle, known as Todd Hall; \$40,000 to \$50,000 available; plans have been prepared.

McWhirtersville (not a P. O.), Tenn.—Davidson County Board of Education, Nashville, Tenn., opened bids for erection of school building near McWhirtersville; plans by Chas. A. Ferguson, 63 Arcade, Nashville.

Montgomery, Ala.—The High School Commission has decided to locate school buildings to be erected in various counties of Alabama as follows: Vernon, \$10,000; Fayette, \$12,500; Moulton, \$10,000; Fort Deposit, \$12,000; Andalusia, \$25,000; latter will have electric lights, water-works and sanitary sewer system.

Morehouse, Mo.—City has voted \$6000 of bonds to erect school building. Address The Mayor.

Muskogee, Okla.—City will erect school buildings. Address The Mayor. (See Water-Works.)

Nashville, Tenn.—City Board of Education has opened bids for erection of Murphy School building; plans by G. L. Lockhart, First National Bank Building, and Charles A. Ferguson, 63 Arcade, both of Nashville; appropriation \$30,000.

Prairie View, Texas.—Agricultural and Mechanical College will open bids June 8 at College Station, Texas, for erection of three-story brick building at Prairie View, Texas; plans and specifications by Smith & Schenk, architects, Fort Worth, Texas, on file at College Station and with architects at Fort Worth. Separate bids will be received for plumbing and electric wiring. (Previously mentioned. See "Machinery Wanted.")

Richmond, Va.—Union Theological Seminary awarded contract to J. T. Nuckolls of Richmond to erect refectory building; bid, \$36,947 for building and \$2640 for heating plant; plans by Charles K. Bryant of Richmond.

Rock Hill, S. C.—Winthrop College, Dr. D. B. Johnson, president, has accepted plans by Edwards, Walter & Parham, Candler Building, Atlanta, Ga., for dormitory; accommodations for 250 girls in addition to present enrollment; \$60,000 available. (Mentioned in March.)

Rosebud, Texas.—Dr. F. Buggin, president School Board, will receive bids until May 18 for erection of brick school building; certified check, \$500; plans on file at office of Dr. Buggin at Rosebud or of C. H. Page, Jr., & Bro., architects, Austin, Texas. (Recently mentioned.)

Rowena, Texas.—City will vote on \$6000 bond issue to erect school building. Address The Mayor.

Rutledge, Ga.—City will erect school building; C. Gadsden Sayre & Co., Anderson, S. C., are preparing plans.

Shady Point, Okla.—City will issue \$5000 of bonds for erection of brick school building. Address The Mayor.

Sinton, Texas.—City will erect proposed \$6000 schoolhouse; two stories; brick; architect, Henry Phelps, San Antonio, Texas; contractor, S. Williams, Taft, Texas.

Springfield, Mo.—State Normal School dormitory, plans recently noted to be prepared by J. B. Legg, St. Louis, Mo., will be stone building, 80x96 feet in size; steam heat; gas and electric lighting; kitchen and laundry equipment; cost \$25,000; date of opening bids not fixed; W. T. Carrington, president of school.

Staunton, Va.—Virginia School for Deaf and Blind had plans prepared by N. T. Wingfield, Charlottesville, Va., for Swanson Hall, recently noted to be erected; contractor, Virginia Lumber Co., Staunton, Va.; three-story brick building; stone trimmings; porch with Colonial pillars; 16 rooms; basement for gymnasium; steam heat; gas and electric lighting; cost \$19,000.

Tallulah, La.—Police Jury of Madison county will call election for voting on bond issue of \$30,000 for erecting and repairing school buildings in county; \$20,000 to be used in erecting school building at Tallulah.

Tazewell, Va.—City will erect school building to cost \$18,000. Address The Mayor.

Vicksburg, Miss.—Mississippi Diocesan Girls' College will open bids about June 1 for erection of school building recently mentioned; three stories and basement; brick; steam heat; electric lighting; plans by DeBuys, Churchill & Labouisse, New Orleans, La.

Virginia Beach, Fla.—City will have plans and specifications prepared for school building; B. P. Holland, Mayor.

Wheeling, W. Va.—Plans will be received until June 10 for school building. For further information address Walter H. Hall, clerk Board of Education.

Winston-Salem, N. C.—Howard & Moss,

Newport News, Va., have contract at \$25,443 to erect school building at Winston-Salem; 160x78 feet; two stories; red brick and brown mortar; plans by H. C. Linthicum, Durham, N. C.

Woodruff, S. C.—City will erect school building to cost \$15,000; architects, C. Gadsden Sayre & Co., Payne Building, Anderson, S. C.

Woodruff, S. C.—C. Gadsden Sayre & Co., Anderson, S. C., are preparing plans for school building at Woodruff.

## THEATERS

Yazoo City, Miss.—Company organized by D. Wolerstein and others considering adoption of plans by Christian Construction Co., Rochester, N. Y., for opera-house, previously mentioned; frontage of site, 69 feet; seating capacity, 1100; estimated cost, \$30,000.

## WAREHOUSES

Baltimore, Md.—A. B. McCreery, San Francisco, Cal., represented by Baldwin & Frick, Keyser Building, Baltimore, will erect warehouse and store at 35 Hopkins place; six stories and basement; 50x200 feet; fireproof; reinforced concrete, with brick exterior; metal window frames and cornice; cost about \$80,000; contract awarded to Thomas L. Jones & Son, 2122 Bolton avenue, Baltimore.

Baltimore, Md.—Julius Pyles, 410 Dover street, will erect warehouse at 410-412 Dover street; brick; 31x77 feet; four stories; slag roof; estimated cost \$3500; Herbert Alken, 2215 North Calvert street, architect; Mr. Pyles, owner and builder.

Baltimore, Md.—Lipps-Murbach Company, Hollins street and Calverton road, will erect warehouse; six stories; brick; 80 feet square; cost about \$12,000; contract awarded to Edward Pletert, 222 Perry street.

Brandon, Miss.—Planters' Gin, Warehouse & Compress Co. will erect warehouse.

El Campo, Texas.—Jas. Shapley, Houston, Texas, has contract for erection of rice warehouse; construction commenced.

Ganado, Texas.—Farmers Mill & Storage Co. is having plans prepared by C. W. McCollister for proposed rice warehouse; one story, 65x150 feet; 50-foot elevator tower; mill construction; will install elevator stands, cleaner, screw conveyors, hopper scales, etc.; H. B. Allen Sickel, assistant manager.

Houston, Texas.—H. D. Taylor estate is planning to build warehouse; two stories and basement; 100 feet square; cost about \$20,000.

Kansas City, Mo.—Mrs. Ada Cameron will erect warehouse; four stories; brick; 70x70 feet; cost estimated at \$20,000; Hucks & Sexton, Kansas City, contractors.

New Orleans, La.—W. B. Thompson, president New Orleans Cotton Exchange, has proposed erection of central cotton warehouse on river front, to be equipped with facilities for rapid handling of cotton.

St. Louis, Mo.—Ver Steeg Warehouse & Transfer Co. incorporated with \$10,000 capital stock by F. B. Ver Steeg, W. B. Ver Steeg and Charles Heilmers.

Tulsa, Okla.—S. M. Jones Company, Toledo, Ohio, contemplates erection of warehouse in Tulsa.

Wadsworth, Texas.—B. A. Ryman, Matagorda, Texas, will erect rice warehouse at cost of about \$25,000; 240x90 feet; plans by J. R. Large, Bay City, Texas.

## RAILROAD CONSTRUCTION

### RAILWAYS

Ablene, Texas.—Reported that the Colorado Southern lines contemplate building an extension south from Abilene to Uvalde, Texas, about 25 miles, and thence to a connection with the St. Louis, Brownsville & Mexico Railway at Sam Fordyce, Texas, about the same distance, making a total of 50 miles. Frank Trumbull is chairman of the board, 71 Broadway, New York.

Alexander, W. Va.—The Alexander & Eastern Railway Co. has been chartered to build a railroad from Alexander, in Upshur county, to Elkins, W. Va., 25 or 30 miles, with principal office at 806 West Pike street, Clarksburg, W. Va.; authorized capital, \$100,000. John B. Hart and C. M. Hart are interested.

Annapolis, Md.—The Baltimore & Annapolis Short Line Railroad, owned by the Maryland Electric Railway Co., has sold \$250,000 of 5 per cent. bonds, making a total of \$1,000,000, which will be used for its new terminal line at Annapolis. John Wilson is president, 4 South Calvert street, Baltimore, Md.

Austin, Texas.—The International & Great

Northern Railroad, it is reported, will rebuild the line of the Austin Dam & Suburban Railway, several miles long, which it purchased some years ago. O. H. Crittenden is chief engineer at Palestine, Texas.

Bainbridge, Ga.—Concerning the report that the Bainbridge Northeastern Railroad proposed to extend its line, Mr. J. M. Wilkinson, receiver, Valdosta, Ga., informs the Manufacturers' Record that there are no prospects of any construction in the near future.

Beaumont, Texas.—A. M. Kiser has, it is reported, succeeded B. B. Gordon as chief engineer of the Frisco lines in Louisiana and Texas, Mr. Gordon having resigned; office at Beaumont.

Belington, W. Va.—Reported that the Pittsburgh & Lake Erie Railway will build the Belington & Northern line from Geneva via Morgantown and Clarksburg, W. Va., to Belington. J. A. Atwood is chief engineer of the Pittsburgh & Lake Erie at Pittsburgh, Pa.

Bethany, W. Va.—The Wellsburg & Bethany Electric Railway Co. has begun construction in Bethany, the line being practically completed from Bethany to Wellsburg, about seven miles, and it will be opened soon. T. E. Cramblett of Bethany and others are interested.

Bogalusa, La.—The Great Southern Lumber Co., it is reported, will build about 20 miles more of logging railroad. W. H. Sullivan is general superintendent.

Bristol, Tenn.—The Virginia & Southwestern Railway Co. has filed a mortgage to secure \$7,000,000 of bonds recently authorized. A deed has been also recorded conveying the rights of way of the Virginia & Southeastern Railway to the first-named company, covering a proposed line from Clinchport, Va., to Toms Creek, Va., and an extension may be built. J. B. Newton is vice-president and general manager, and E. S. Fraser is chief engineer, both at Bristol, Tenn.

Chickasha, Okla.—Reported that the Chickasha Interurban Railroad, in which Scott Jones and others are interested, has closed a deal for the right of way of the Oklahoma City, Lexington & Sulphur Electric Railway between Pauls Valley and Sulphur, Okla. This line is already graded between Sulphur and Davis, and Chickasha will be the western terminus.

Chickasha, Okla.—Plans are reported under way to build a railroad from Chickasha, via Weatherford, Taloga and Gage, to Beaver, Okla., about 200 miles. D. D. Sayer, president of the Chickasha Commercial Club, can probably give information.

Danville, Ky.—The Danville, Columbia & Scottsville Railroad Co., it is reported, contemplates building its line via Glasgow, Ky. The entire route is from Danville to Scottsville, Ky., with a total length of 160 miles. J. F. Allen is president, L. M. Shaw is treasurer, and J. H. Sullivan is engineer, all of Danville, Ky.

Dothan, Ala.—The Atlanta & St. Andrews Bay Railroad Co. is reported to have begun operating its extension from Fountain, Fla., to Youngstown, Fla., eight miles. A. B. Steele of Atlanta, Ga., is president. He is also head of the Enterprise Lumber Co.

Elkins, W. Va.—The Elkins Electric Railroad Co., which proposes to build a line from Elkins via Belington to Grafton, W. Va., is reported to have completed survey for the entire line via Meadowville, Nestorville and near Knottsville. J. C. Broomfield is chief engineer at Elkins, W. Va.; J. C. McSpadden of Rockwood, Pa., is president; J. E. Morgan of Elkins, W. Va., is vice-president and general manager, and W. K. Taylor is secretary and treasurer.

Eureka Mills, Va.—Mr. Wood Bouldin, Jr., writes from Houston, Va., to the Manufacturers' Record denying the recent press report that he had made a survey for an electric railway from Drake's Branch to Charlotte Court House. Such a plan has been discussed at Charlotte, but nothing more.

Fayetteville, Ark.—The Northwest Construction Co. of Minneapolis, Minn., is reported to be planning to build an interurban electric railway in Arkansas, to run through Washington, Benton and Madison counties.

Frederick, Md.—The Washington, Frederick & Gettysburg Railway Co. has, it is reported, decided to build immediately the proposed extension of 3½ miles from Lewistown to Catoclin Furnace. D. Columbus Kemp of Frederick is president.

Frederick, Md.—The Washington, Frederick & Gettysburg Railway Co. is receiving bids for the extension of its line from Lewistown, Md., to a connection with the Monocacy Valley Railroad, the reported distance being about three and one-half miles. There will be 12,000 cubic yards of excavation, 75,000 feet (board measure) of trestling and 100 cubic

yards of fourth-class masonry. Contract expected to be awarded May 25. D. Columbus Kemp is president and A. C. McBride general manager, both at Frederick, Md.

Hillsboro, Texas.—The Trinity & Brazos Valley Railway, it is reported, proposes to build a bridge and viaduct at Hillsboro, Texas, to cost about \$16,000. P. G. Burns is chief engineer at Houston, Texas.

Indianola, Miss.—The Yazoo & Mississippi Valley Railroad (Illinois Central system), it is reported, contemplates building a new line about 40 miles long north and south through Indianola. A. S. Baldwin is chief engineer of the Illinois Central at Chicago.

Jennings, La.—The press report that the Colorado Southern, New Orleans & Pacific Railroad Co. would build a branch from Elton to Lake Arthur, La., is officially denied in a letter to the Manufacturers' Record, which says that the company is not contemplating any branches or extensions.

Johnson City, Tenn.—The Carolina, Clinchfield & Ohio Railroad Co. will hold a stockholders' meeting on May 13 to approve \$15,000,000 of bonds to complete the line. M. J. Caples is vice-president, general manager and chief engineer at Johnson City, Tenn.

Joplin, Mo.—The Joplin & Pittsburg Railway Co. will receive bids for laying track, bonding and ballasting 25 miles of line from Joplin, Mo., to Pittsburg, Kan. Address, 306 First National Bank Building, Kansas City, Mo.

Lafayette, La.—The Lafayette, Eunice & Abbeville Railway Co. is reported to have made survey, established grades and prepared estimates concerning its proposed line, about 60 miles long. George A. Clark is manager. Others interested are J. I. Lewis, president; Charles D. Caffery, secretary; L. F. Lonnbladh, chief engineer; P. L. Declouet, E. G. Voorhies, James I. Ewell, A. J. Goddard, Dr. J. A. Villien and Julien Mouton, directors.

Louisville, Ga.—Mr. Frank R. Durden, president of the Durden Pine Co., Savannah, Ga., writes the Manufacturers' Record confirming the report that he and associates have applied for a charter for the Cotton Belt Railroad Co. to build a line from Louisville via Vidette and Waynesboro, Ga., to the Savannah river at or near Shell Bluff Landing, about 60 miles.

Marshall, Texas.—The Sabine Valley Railway Co., chartered to build a line from Marshall toward Port Arthur, Texas, is reported to have surveyed 22 miles of the proposed route and to be securing subscriptions. John Auchincloss of West Orange, N. J., is president; L. E. Walker of Marshall, Texas, first vice-president and general manager; E. P. Taylor, Jr., of New York city, second vice-president; H. L. Jackson, consulting engineer; R. Y. Walker, engineer in charge; headquarters at Marshall.

Mena, Ark.—The Mena & Eastern Railroad is reported to have completed eight miles of grading on its proposed line between Black Springs and Mena.

Millry, Ala.—The Tombigbee Valley Railroad, it is reported, will be extended from Silas, Ala., northward to Cochrane, Ala., to connect with the Alabama, Tennessee & Northern Railroad, owned by the same interests. William Toxey is chief engineer at Calvert, Ala.

Mountain Home, Ark.—Rights of way are reported obtained for the Mountain Home & White River Railroad, to be 11 miles long, from Mountain Home to a connection with the St. Louis, Iron Mountain & Southern Railroad. As heretofore noted, this is to be the beginning of a through line from St. Louis to the Southwest. W. L. Marshall of Mountain Home, Ark., and others are interested.

Mount Pleasant, Tenn.—J. E. Rodas & Co. of Knoxville, Tenn., have, according to a press report, completed their contract on the Swan Creek Valley Railroad, an extension from the Louisville & Nashville Railroad at Mount Pleasant, Tenn., to Mayfield, Tenn., 16 miles. A survey has also been made beyond Mayfield.

Nashville, Tenn.—S. J. Mankin and John Ray of Mount Pleasant, Tenn., have, it is reported, been given the contract to finish grading on the Nashville & Columbia Interurban Electric Railway between Nashville and Franklin, Tenn., and have begun work. The plan is to complete the line by July 1.

New Orleans, La.—The New Orleans Southern Railroad Co. is reported to be pushing work on the Myrtle Grove extension of the New Orleans, Fort Jackson & Grand Isle Railroad. Arthur Kennedy is president, Charles D. Haines vice-president, and F. Muller treasurer, at New Orleans.

Oakland, Md.—Concerning the report that an electric railway will be built from Oak-



land to Swallow Falls, Md., six miles, Mr. H. P. Tasker, general manager of the Youghiogheny Light & Power Co., Oakland, Md., writes the Manufacturers' Record that it is proposed to build a standard-gauge electric railroad. It is also contemplated to build—after this is constructed—a branch about 30 miles long to Uniontown, Pa.; also a lateral branch from this to Kingwood, about 12 miles; also another branch 14 miles long to connect with the railroad of the Jennings Lumber & Coal Co. Financing is delayed as a result of the panic. Other officers of the company are A. C. Sturgiss, president; Truman West, vice-president; P. A. Chisholm, second vice-president; James D. Hamill, treasurer; Bowie Johnson, secretary.

Onancock, Va.—The Accomac Traction & Power Co., it is reported, will soon begin construction of its electric railway from Onancock via Tasley and Accomac Courthouse to Battle Point, on Metompkin bay, about nine miles; capital \$175,000. Spencer F. Rogers of Finney, Va., is president; Dr. John H. Ayres of Accomac, Va., vice-president; T. W. Taylor of Onancock, Va., secretary; John S. Maples of Onancock, treasurer. James D. Lalor is chief engineer at 1230 Arch street, Philadelphia, Pa.

Opelika, Ala.—The Alabama Railway & Electric Co. of Opelika has filed incorporation articles to build from Anniston, Ala., or some other point, south to Dothan, Ala., and thence to the Florida boundary in either Henry or Geneva counties. It will probably run through Calhoun, Tallapoosa, Chambers, Lee, Russell, Barbour, Dale and Houston counties; capital \$200,000. The incorporators are A. M. Buchanan of Opelika, Ala.; Judson C. Chapman of Atlanta, Ga.; S. A. Wadlaw and J. M. Shelly, the latter of Atlanta. Contractors should address Mr. Chapman at 223 Century Building, Atlanta, Ga.

Oregon, Mo.—The Oregon Interurban Railway Co., an official is reported as saying, will build five miles of standard-gauge line from Oregon to Forest City, Mo.; capital \$60,000. Survey made but the company is not yet ready to award contracts. Benjamin F. Morgan is president and Lewis I. Moore, secretary-treasurer. George Custer of Marysville, Mo., is chief engineer.

Port Arthur, Texas.—The Port Arthur & Houston Short Line Railroad Co. has been granted a 90-day extension of its franchise. Among those interested are C. S. Cleaver of Houston, Texas; A. O. Blackwell of La Porte, Texas; H. F. Best of Port Arthur, Texas, and J. E. Carter of New York.

Reisterstown, Md.—Reported that the Pennsylvania Railway & Power Co. of Hanover is endeavoring to secure franchises in Baltimore and Carroll counties for an electric railway from Hanover, Pa., to Glyndon, Md., to connect with the Baltimore & Emory Grove electric line. Those interested are probably the same as the incorporators of the projected Baltimore & Pennsylvania Railroad Co., which sought a charter from the Maryland Legislature. They are William Massenheim, Charles J. Wells, Jesse A. Davis, Henry M. Foster and C. Dickerson Day. Line is to run via Hampstead and Manchester, Md. Howard Tebbis, 1209 Calvert Building, Baltimore, is also said to be interested.

Ruston, La.—President J. C. Nolan of the Ruston, Natchitoches & Northeastern Railroad Co. writes the Manufacturers' Record saying that the route will be about as shown in the Manufacturers' Record of May 7, but the exact location has not been determined south of Leesville, La. Work will be comparatively light. It is expected to soon call for bids.

San Antonio, Texas.—H. G. Shaner, chief engineer of the Texas Short Line, is reported as saying that a branch 25 miles long will be built from Comfort to Fredericksburg, Texas. The main line will reach San Antonio and other points as heretofore announced. J. G. Short is president at Monterey, Mexico, which is also Mr. Shaner's address.

Stanton, Texas.—The West Texas & Northern Railroad is reported to be completing its first 20 miles of grade northward from Stanton, the West Texas Construction Co. being the contractor.

Statesboro, Ga.—The Savannah, Augusta & Northern Railroad Co. reports to the Georgia Railroad Commission that it has laid track from Statesboro to Garfield, Ga., on the Millen & Southwestern Railroad, 25 miles. It has also completed grade practically from Garfield to Louisville, Ga., and the line is located beyond Louisville via Spread to Thomson, Ga., on the Georgia Railroad, and rights of way secured. It is proposed to rapidly continue construction as far as Thomson. From Thomson to Wash-

ington, Ga., the route has been practically located, but rights of way are not all secured, and it might be changed. No definite location has been made beyond Washington.

### STREET RAILWAYS

Chattanooga, Tenn.—The Chattanooga Railways Co., it is reported, will begin survey immediately for the Rossville Avenue Car Line. D. J. Duncan is general manager at Chattanooga.

Norfolk, Va.—The Norfolk & Portsmouth Traction Co. contemplates improvements and extensions of its tracks. E. C. Hathaway is general manager at Norfolk, Va.

Oklahoma City, Okla.—The Oklahoma Electric Railway Co., it is reported, contemplates building an extension to the State Fair Grounds. J. W. Shartell is vice-president and general manager.

San Angelo, Texas.—Reported that a company with \$100,000 capital has been organized to build an electric street railway, and construction will begin as soon as the franchise is obtained. Among those interested are E. E. Bailey, vice-president of the San Angelo Bank & Trust Co.; R. Wilbur Brown and W. T. Bartholomew, attorneys at law, the latter recently of Houston, Texas. Later: The San Angelo Power & Traction Co. is reported incorporated at Austin, Texas, to build the line; capital \$50,000. T. M. Vaughan, J. A. Williams, W. D. Fuller, J. H. Ransom and J. Curtis Simmons are the incorporators.

Spartanburg, S. C.—The Electric Power & Manufacturing Co., which recently bought the Spartanburg Gas & Electric Co., will, it is reported, make large extensions to surrounding mill towns. F. D. McEwen is vice-president and general manager at Spartanburg.

Vicksburg, Miss.—The Vicksburg Street Railway & Lighting Co. is reported purchased by S. S. Bullis and others, and President Bullis is quoted as saying that two companies will be organized, one for the lighting business and the other for the railway. Improvements may be made. The companies will be named respectively, the Vicksburg Power Co. and the Vicksburg Transit Co.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED

**Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.**

Air Compressor.—See "Pumps."

Air Compressor.—Town of Salem, Va., wants electric-driven air compressor and air-lift system, to lift water from well 800 feet deep and 8 inches in diameter. Address John E. Shank, committee.

Air Compressor and Tank.—Donigan & Barrett, Louisville, Ky., want second-hand standard-make straight-line air compressor; to furnish about 500 feet free air per minute; about 90 or 100 pounds pressure; equipped with relief or pressure governor; also want storage tank of about 600 feet capacity.

Air Compressors.—H. W. Elmer, Evans City, Pa., in market for two straight-line air compressors; capacity 1200 to 1500 feet.

Alcohol Machinery.—Fitzpatrick Drug Co., 411 Cherry street, Helena, Ark., wants addresses of makers of stills for manufacturing denatured alcohol.

Band Wheel.—M. R., Box 2, Station A, Cincinnati, Ohio, wants band wheel, 96-inch diameter, 25-inch face, split or solid, to bore 8 1/2 inches; weighing 5000 to 7000 pounds.

Blueprint.—See "Coating Machine."

Brick Machinery.—Thomas Edwards, Ridgeland, Miss., wants prices of brick machinery.

Bricks.—J. P. Little, chairman of Street Committee, Clearwater, Fla., wants prices on vitrified bricks for paving.

Bridge Construction.—Board of Commissioners of Roads and Revenues of Polk county, Cedartown, Ga., will open bids May 18 for construction of bridge over Cedar creek; plans and specifications for both steel and concrete structure on file with T. H.

Adams, Commissioner, Cedartown. Bidders on concrete work will be required to furnish sample of reinforced concrete. Plans and specifications for steel bridge prepared by Roanoke Bridge Co., Roanoke, Va., and for concrete structure by Wagener & Son, Atlanta, Ga. Address bids to J. C. Walker, clerk, Cedartown.

Boilers.—Thos. Edwards, Ridgeland, Miss., wants prices on boilers.

Buckles.—See "Overall Supplies."

Building Materials.—B. A. Shroot, R. F. D. No. 2, Owensville, Ky., wants prices on building materials for \$3000 store and lodge building.

Building Materials, etc.—T. Geo. Chachere, Box 255, Opelousas, La., wants catalogues, samples and prices on building materials and other product of interest to architects.

Bulkhead Construction.—Baltimore (Md.) Board of Awards, J. Barry Mahool, president, will open bids May 20 for construction of stone and timber bulkhead on north side of center pier, back basin; certified check, \$500; plans and specifications obtainable at Harbor Board Annex Office; O. F. Lackey, Harbor Engineer.

Buttons.—See "Overall Supplies."

Canning Machinery.—R. O. Bagley, Moyock, N. C., wants prices on vegetable cannery equipment.

Cans.—F. W. Brewer, Cave City, Ark., wants carload Nos. 2 to 3 cans.

Cement.—Faragher Engineering Co., Asheville, N. C., wants 6000 barrels Portland cement; immediate Lynchburg (Va.) delivery.

Coal.—Proposals will be received at United States Postoffice and Courthouse building, Kansas City, Mo., until May 21 for furnishing 2000 tons of bituminous coal during year ending June 30, 1909; C. W. Clarke, custodian.

Coating Machine.—Brady & Morfit, Inc., Fairmont, W. Va., want quotations on coating machine to manufacture blueprint paper.

Cotton Cloth.—Fulton Overall Manufacturing Co., Fulton, Ky., wants to buy denim and drill. (See "Overall Supplies.")

Cotton Oil.—E. Arnold, Lauterstrasse 15, Mainz, Germany, wants to represent manufacturers of cotton oil.

Crusher.—Virginia Blower & Manufacturing Co., Inc., 11th and Dock streets, Richmond, Va., wants quotations on small crusher or hog for crushing coconut shells. State shipping weight and maximum horsepower required for crushing 200 to 400 pounds per hour.

Distilling Machinery.—See "Alcohol Machinery."

Dredging.—Sinepuxent Salt Water Inlet Co., Inc., Berlin, Md., wants to correspond with contractors and dredgers relative to dredging work near Ocean City, Md.

Dredging.—Bids are being received to complete work of digging Bayou Bourbeux; 161 acres; approximately 120,000 yards of dirt; use of land dredge, one-yard orange-peel, will be furnished. Address R. G. Comeaux, secretary, Plaquemine, La.

Drier.—J. B. Gardner, Adairsville, Ga., wants drier of 50 to 200 bushels daily capacity; for fruit.

Dumping Carts.—Gaston Metal & Roofing Co., Gastonia, N. C., wants addresses of manufacturers of city garbage dumping carts.

Electrical Machinery.—See "Air Compressor."

Electrical Machinery.—Berrien Moore, 500 Courtland street, Atlanta, Ga., wants to correspond with manufacturers of electrical machinery, with view to representation.

Electric-light Plant.—L. L. Heyman, chairman committee, Clinton, La., wants to correspond with engineers or firms relative to installation of municipal electric-light plant.

Electric Wiring.—Agricultural and Mechanical College, College Station, Texas, will award contract June 8 for electric wiring and plumbing for building to be erected at Prairie View. (See "Schools.")

Engine.—Thos. Edwards, Ridgeland, Miss., wants prices on steam engine.

Engine.—A. T. Dickey, City Engineer, Galveston, Texas, wants prices on engine. See "Pumps" and "Air Compressor."

Excavating Machinery.—Sinepuxent Salt Water Inlet Co., Berlin, Md., will need sand blower or mud machine for cutting through beach sand and blowing it back on bulkhead.

Fire Hose.—Baltimore County Commissioners, Towson, Md., will open bids May 19 for furnishing 2500 feet of two-and-one-half-inch standard fire hose; E. Stanton Bosley, chief clerk.

Fire Protection.—See "Sprinkler Equipment."

Gasoline Engine.—Thos. Edwards, Ridgeland, Miss., wants prices on gasoline engine. Glass.—See "Store Fronts."

Hardware.—C. Eugene Allen, 143 Ashley street, Atlanta, Ga., wants addresses of manufacturers of wood screws and carriage and tire bolts.

Hardware.—Jas. A. Dezell, Greensboro, Fla., wants catalogues and dealers' prices on general hardware and mill supplies.

Hardware.—A. J. Keynton, 23 Burton avenue, Montgomery, Ala., wants prices on builders' hardware.

Hardware.—Boswell & Co., Wynyard Building, 40 Carrington street, N. S. W., Australia, wants to represent manufacturers of builders' hardware.

Heating Plant.—Ahern & Albert, care of H. Albert, 2631 Olive street, St. Louis, Mo., want prices on heating plant for \$30,000 building.

Heating Plant.—J. E. Broussard, Beaumont, Texas, wants prices on heating plant for \$15,000 residence.

Heating Plant.—H. F. Alexander, Columbia, Tenn., wants prices on hot-water heating system for \$5000 residence.

Hoisting Machinery.—Brady & Morfit, Inc., Fairmont, W. Va., in market for hoisting machinery suitable for small mine hoist; new or second-hand.

Ice Plant.—I. L. Heyman, chairman committee, Clinton, La., wants to correspond relative to establishment of municipal ice plant.

Iron-bed Machinery.—See "Springs and Iron Beds."

Iron Steps and Stairways.—Whiting & Smith, Berryville, Va., want addresses of manufacturers of iron steps and stairways.

Iron Work.—C. H. Turner & Co., Evinston, Va., want prices on structural iron work, erected.

Lathe.—Haworth Lumber & Manufacturing Co., Haworth, Okla., wants lathe for turning neck-yokes, single-trees, etc.

Laundry Equipment.—Bids will be opened May 29 at headquarters U. S. Marine Corps, office of F. L. Denny, Colonel, Quartermaster, Washington, D. C., to erect and equip two laundries, one at navy-yard, League Island, Pennsylvania, and one at navy-yard, Norfolk, Va. Blanks and general information obtainable at above office or from commanding officers, marine barracks, at stations named.

Laundry Equipment.—Quartermaster, U. S. Marine Corps, Washington, D. C., invites sealed proposals until May 29 to erect and equip two laundries—one at navy-yard, League Island, Pa., and one at navy-yard, Norfolk, Va.

Laundry Machinery.—T. M. Henry, Jackson, Miss., secretary Jefferson Davis Beauvoir Memorial Home, wants bids on installation of laundry plant complete; capacity 200; estimated cost \$3000.

Locomotive.—See "Logging Engine."

Logging Engine.—Blount-Decker Lumber Co., Alto, Texas, wants logging engine.

Lumber.—Faragher Engineering Co., Asheville, N. C., wants form lumber; immediate Lynchburg (Va.) delivery.

Machine Tools.—Lane Bros. Company, Alhambra, Va., in market for 36-inch triple-gear second-hand engine lathe, 8 feet between centers; 18-inch modern type new or second-hand engine lathe, 8 feet between centers; 24-inch crank shaper, new or second-hand; 26-inch drill press, back-gear, new or second-hand; want prices and full information.

Mantels.—J. E. Broussard, Beaumont, Texas, wants prices on fireplace mantels.

Mantels.—A. J. Keynton, 23 Burton avenue, Montgomery, Ala., wants prices on cabinet mantels.

Metal Novelties.—F. Moorman, Box 252, Middletown, Ky., wants to correspond with manufacturers of metal novelties.

Mill Supplies.—See "Hardware."

Mine Cages.—Brady & Morfit, Inc., Fairmont, W. Va., want automatic dump mine cages; new or second-hand.

Motor Car.—See "Railway Car."

Moving-picture Machinery.—W. D. Booth, Roanoke, Va., wants moving-picture machinery and supplies.

Overall Machinery.—Cassell & Elliott, Roanoke, Va., want to correspond with manufacturers of machinery for making overalls and working shirts.

Overall Supplies.—Fulton Overall Manufacturing Co., Fulton, Ky., wants denims, drill, buttons and buckles.

Paint.—A. J. Keynton, 23 Burton avenue, Montgomery, Ala., wants prices on painting supplies.

Paints.—S. Pincus, Cookeville, Tenn., wants prices on paints.

Paving.—City of Clarksville, Va., will open bids May 25 for laying about 2000 yards granolithic pavement; Samuel Davis and G. E. Vaughan, Street Commissioners.

Paving.—City of Salisbury, N. C., will receive sealed proposals until May 21 on grading, curbing and paving streets; \$50,000 to be expended; vitrified brick (or block), bitulithic, Belgian block, asphalt, asphalt block and macadam will be considered. Address Hon. A. H. Boyden, Mayor, or H. J. Overman, City Clerk. (Lately mentioned.)

Paving-block Machinery.—H. W. Denton, Empire Building, Atlanta, Ga., wants data and prices on machinery for manufacturing wood paving blocks.

Phosphate.—E. Arnold, Lauterstrasse 16, Mainz, Germany, wants to represent exporters of phosphate.

Piping and Specials.—W. C. N. Randolph, Jr., superintendent water-works, Lynchburg, Va., will receive bids until May 18 for 160 tons of 10-inch and 20 tons of 8-inch pipe; also special casting for same; to be delivered between May 25 and July 1.

Planing Mill.—Blount-Decker Lumber Co., Alto, Texas, wants planer machinery.

Plaster.—A. J. Keynton, 23 Burton avenue, Montgomery, Ala., wants prices on 15 tons plaster.

Plumbing.—See "Electric Wiring."

Pulleys.—See "Band Wheel."

Pumps.—Thos. Edwards, Ridgeland, Miss., wants prices on pumps.

Pumps.—City of Galveston, Texas, in market for engine and air-compressing pumps to raise 4,000,000 gallons water every 24 hours from depth of 800 feet to surface. Address A. T. Dickey, City Engineer.

Railroad Construction.—Washington, Frederick & Gettysburg Railway Co., D. Columbus Kemp, president, Frederick, Md., will open proposals May 25 for railway construction; preliminary estimates show 12,000 cubic yards excavation, 75,000 feet trestling (board measure) and 100 cubic yards fourth-class masonry; contract to be let at straight price per cubic yard and company to furnish building materials; plans and specifications at company's office.

Rails.—Blount-Decker Lumber Co., Alto, Texas, wants seven miles 35-pound steel rails.

Rails.—Propst Contracting Co., Charlotte, N. C., in market for 15 tons of 45-pound second-hand rail.

Railway Car.—E. E. Davis, C. E., Standard & Hernandez Railroad Co., Rockwell, Fla., wants No. 15 second-hand Sheffield inspection motor car.

Road Construction.—W. W. Crosby, chief engineer Maryland Geological Survey, Baltimore, Md., will open bids May 23 for improving State road No. 1, Section 9; proposals to be made on forms furnished by Maryland Geological Survey, obtained through Baltimore office; grading and macadamizing about three miles, according to plans and specifications in office of Survey; certified check, \$200.

Road Roller.—John G. Duncan Company, 308 West Jackson avenue, Knoxville, Tenn., wants dealers' prices on 10-ton second-hand both steam and horse-power road roller.

Roofing.—J. E. Broussard, Beaumont, Texas, wants prices on slate roofing.

Roofing.—S. Pincus, Cookeville, Tenn., wants prices on roofing for \$7500 store building.

Sanding Machine.—See "Woodworking Machinery."

Sewer Construction.—E. E. Ellsworth, Recorder, Johnson City, Tenn., will receive sealed proposals until May 28 on construction of trunk sewer (18, 20 and 24-inch) approximately 5000 feet, and of submain, 8 to 15-inch size, approximately 2200 feet, with manholes, Ys, etc. Plans and specifications at office of City Engineer, L. N. Wilson, Jr.

Spoke Machinery.—Haworth Lumber & Manufacturing Co., Haworth, Okla., wants complete set spoke-manufacturing machinery.

Sewer Construction.—City Council, Cape Girardeau, Mo., will receive bids until May 18 for furnishing material and constructing sewer system in District No. 1; work comprises about 12 miles of pipe sewers 8 to 22 inches in diameter, together with necessary appurtenances; plans and specifications on file with Chris F. Betten, City Clerk, Cape Girardeau, from whom printed specifications can be obtained on application; certified check, \$1000; Warren C. Patten, Mayor; C. C. Hawley, City Engineer.

Sewer Construction.—Sealed proposals for construction of sewer and water systems at Fort St. Philip, Louisiana, will be received until June 15; information on application.

Proposals should be marked "Proposals for Sewer and Water Systems," addressed to Arthur Cranston, Captain, Quartermaster, Quartermaster's Office, U. S. Army, New Orleans, La.

Spring and Iron-bed Machinery.—Athens Mattress & Spring Bed Co., Athens, Ga., wants to correspond with manufacturers of machinery for making bed springs and iron beds.

Sprinkler Equipment.—Brown Manufacturing Co., Greenville, Tenn., will install automatic sprinkler system, and wants quotations on equipment for its own and possibly other establishments.

Steam-plant Machinery.—Berrien Moore, 500 Courtland street, Atlanta, Ga., wants to correspond with manufacturers of steam-plant machinery, with view to representation.

Steel Ceilings.—S. Pincus, Cookeville, Tenn., wants prices on steel ceiling.

Steel Rods.—Faragher Engineering Co., Asheville, N. C., wants 100 tons open-hearth cold twisted-steel rods; immediate Lynchburg (Va.) delivery.

Stencils.—F. H. Graves, Cordele, Ga., wants names of manufacturers of stencils; wants letter or sign-printing stencils.

Store Fronts.—Justice & Geer, Rutherfordton, N. C., want prices on columns, plate glass and lintels for two 30-foot and one 24-foot store fronts. (Recent mention erred in stating Rutherfordton, S. C.)

Store Fronts.—S. Pincus, Cookeville, Tenn., wants prices on glass fronts for \$7500 store building.

Tank.—Donigan & Barret, Louisville, Ky., want storage tank of about 600 feet capacity for compressed air.

Tools.—Boswell & Co., Wynward Building, 40 Carrington street, N. S. W., Australia,

want to represent manufacturers of edged tools.

Water Supply.—See "Air Compressor."

Water-works.—Sealed proposals for construction of sewer and water systems at Fort St. Philip, Louisiana, will be received at Quartermaster's Office, U. S. Army, New Orleans, La., until June 15; information on application. Proposals should be marked "Proposals for Sewer and Water Systems," addressed to Arthur Cranston, Captain, Quartermaster.

Water-works Machinery.—Sealed bids will be received by F. W. Anderson, City Clerk, Waurika, Okla., until May 22 for cast-iron pipe, pumps, heater, boiler, hydrants and valves and other water-works material; specifications obtainable from O'Neil Engineering Co., Dallas, Texas.

Water-works Machinery.—Bids will be received May 20 by O'Neil Engineering Co., Dallas, Texas, for cast-iron water-pipe, electrically operated triplex pumps and their motors, hydrants and valves and other water-works supplies; specifications and blanks obtainable from O'Neil Engineering Co.

Woodworking Machinery.—See "Paving-block Machinery."

Woodworking Machinery.—J. A. Mills, Sylvania, Ga., wants double-surface planer, weight 4000 or 6000 pounds. Send particulars in first letter.

Woodworking Machinery.—See "Spoke Machinery" and "Lathe."

Woodworking Machinery.—Athens Table & Manufacturing Co., Athens, Tenn., wants machinery for sanding turned table legs.

Woven Wire.—Frank Wright, Cave Springs, Ga., wants woven wire diamond grille for screen doors.

## INDUSTRIAL NEWS OF INTEREST

### Electrical Contract at Gadsden.

Contract for wiring the Hayden-Pake Theater at Gadsden, Ala., has been awarded to the K. E. Electric Co. of that city.

### The Didier-March Company.

The Didier-March Company announces it has discontinued its Baltimore office, and all communications should be sent to the new address, Hudson Terminal Building, 50 Church street, New York.

### Basket Machinery for Sale.

W. P. Hummel, receiver, 1900 Meyers street, Paducah, Ky., will offer for sale on June 1 the automatic basket-manufacturing machinery of the Mergenthaler-Horton plant.

### Contract for Steel Work Awarded.

Contracts are being awarded for the reconstruction of the burned Masonic Temple in Baltimore, Md. They include the order for furnishing and erecting the steel work, and this was given to the Baltimore Bridge Company, general offices and plant at Baltimore.

### Atlanta Utility Works, East Point, Ga.

The Atlanta (Ga.) Utility Works has recently removed its offices to the plant at East Point, Ga., where correspondence should be addressed or investigating purchasers call. This company manufactures machinery for oil mills and fertilizer plants.

### Fort Wayne Electric Works.

The Fort Wayne (Ind.) Electric Works announces the removal of its New York city offices to the Hudson Terminal. The company has been located at 40 New street, but from this time will be located at 30 Church street, having engaged a part of the 15th floor of the Cortlandt Building.

### Vulcan Steam Shovel Co.

In order to make its corporate name more fully indicative of its principal business, which is the manufacture of steam shovels, the Vulcan Iron Works Co. has changed its title to the Vulcan Steam Shovel Co. The plant and offices are at Toledo, Ohio.

### To Represent Machinery Manufacturers.

Berrien Moore, 500 Courtland street, Atlanta, Ga., wants to represent manufacturers of steam and electrical machinery. He is a technical graduate and engineer, and intends to be active in installations of mechanical equipment in the Southern territory.

### Demand for Canning Machinery.

Messrs. A. K. Robins & Co., No. 726 East Pratt street, Baltimore, Md., state that their last year's business was the best that they had ever experienced, but that this year's will exceed that of 1907. The firm has filed

several large contracts and has a number of orders on file now for canning machinery.

### Platform Cars for Sale.

A number of platform cars will be sold at public auction on May 20—13 cars of 36-inch gauge, 12 tons' capacity, 27 feet long and 7 feet 4 inches wide. Sale on premises of New Jersey Car & Equipment Co., Lake View, N. J., in charge of Auctioneer F. C. Walbert of 47 Montgomery street, Jersey City.

### Opportunity for Steel Construction.

A Southern company engaged in steel construction (bridges, buildings, etc.) wants a practical man to take a half-interest in the enterprise. It is stated that this is an exceptional opportunity for the proper man, and less than \$2000 will be required to be invested. Address 286, care of Manufacturers' Record.

### Bristol's Recording Instruments.

Announcement is made of the consolidation of the business of Wm. H. Bristol with that of the Bristol Company, Waterbury, Conn. This company manufactures Bristol's recording instruments for pressure, temperature and electricity, and the Wm. H. Bristol electric pyrometer and patent smoked-chart recorders, also Bristol's patent steel belt lacing. Illustrated literature describing the instruments is now ready for inquirers.

### H. W. Johns-Manville Co. in Detroit.

The business interests of the H. W. Johns-Manville Company, in Detroit, Mich., and the territory adjacent thereto have increased to such an extent that a new branch is about to be established. This branch will be located at No. 72 Jefferson avenue, under the management of Willard K. Bush. Mr. Bush is well known throughout that section, having been connected with the company's Milwaukee branch for years. Complete stocks will be held at Detroit so as to ensure prompt shipments.

### Wm. J. Oliver Manufacturing Co.

The Wm. J. Oliver Manufacturing Co., maker of complete mining and contractors' equipment, is proceeding with betterments at its plant at Knoxville, Tenn. It is building a new erecting shop 80x220 feet in size, remodeling its power plant, installing heavy conveying machinery, and generally improving facilities. The company is also conducting experimental work on an air dump and other special features of dump cars, and expects soon to issue an illustrated catalogue describing the new offerings.

### Lee Electric Co.

The Lee Electric Co. is now installed in its newly-remodeled store and warehouse, Nos.

217 and 219 North Calvert street, Baltimore, Md. It recently purchased the entire stock of the Electrical Material Co. and the Seaboard Electric Co., which, with its own stock, gives a varied assortment of electrical supplies. Shipments on all regular goods are made the same day as the receipt of the order, and all special orders will be given careful and prompt attention. Robert Lee Gill is the company's president, and Arthur L. Bosley is general manager.

### The Electric Supply Co.

The increasing trade of the Electric Supply Co. of Savannah, Ga., has made it necessary for the management to provide enlarged facilities. This is being done by the erection of a three-story brick building containing 11,000 square feet of floor space, which will be occupied about September 1. For 15 years the company has been located at 38 and 40 Drayton street, which premises have been extended several times in order to meet increased needs for space. The company will use the new building exclusively for its electrical machinery and supply enterprise.

### Asbestos Protected Metal.

There has long been a demand for a light building material which would resist rust, corrosion, fire, weather, acid fumes and render permanent service in the construction of factory buildings, warehouses, grain elevators, etc. Asbestos protected metal has been designed to meet this demand, and in addition to serving the purposes of other roofing and siding materials, has the advantage mentioned above. Diven & Donelson, commission machinery agents, 912 Union Trust Building, Baltimore, Md., have been appointed agents for this material, and can furnish details to all persons interested.

### Tucker & Laxton Incorporated.

Messrs. Tucker & Laxton (Incorporated) of Charlotte, N. C., offices in the Auditorium Building, announce their readiness to undertake the engineering and contracting for building or equipping anything in the nature of a power plant, whether steam or hydraulic, from the foundation to the smallest device used and consuming electricity. Mr. Tucker has had wide experience, having been with the American Bridge Co., the Clark Thread Co. and the Westinghouse Electric & Manufacturing Co. Mr. Laxton was with the General Electric Co. as an engineer salesman, and has had plenty of experience in electrical installations.

### The Philadelphia Bourse.

The 17th annual report of the directors of the Philadelphia Bourse was submitted to the stockholders at their annual meeting in Philadelphia, Pa., on May 12. The report showed continued progress with the organization's plans and increases in the exhibitions of mechanical and electrical equipments by prominent manufacturers of various parts of the country. Admissions to the Bourse floor aggregated 752,895 in 1907, an increase of 10,255 over the preceding year. Builders of machinery are invited to write to the secretary, Emil P. Albrecht, regarding the terms on which the spaces for exhibiting machinery may be obtained.

### Link Chain Belt Co.

Because of the continued rapid growth of its trade the Link Chain Belt Co. has found it necessary to enlarge its office and exhibit departments, and has engaged the entire main floor and basement of its building at 52 Dey street, New York. Besides manufacturing its well-known Clouser high-speed chain belts, the company is handling elevating, conveying and power-transmitting machinery of every description. This includes specialties for coal, ash, sand, grain, etc., and equipments for oil mills, sugar refineries, cement and phosphate plants, tanneries, etc. The Link Chain Belt Co. has branches and agents in more than 60 leading cities. Its new catalogue is now being distributed.

### Suydam Protective Paints.

In manufacturing structural steel work, building freight cars, and in railroad construction, it has been found that the durability of the materials used has been greatly improved by the use of a protective paint especially compounded to meet the different requirements. Suydam protective paints, on the market for many years, are made by the furnace or standard railway or steamship specifications and shipped subject to inspection after arrival at destination. The character and quality of each pigment used is carefully and thoroughly considered in order to produce the best results in durability and permanency of color. Complete descriptive data regarding Suydam paints can be obtained from the Maryland Railway & Electric Supply Co., 604 Continental Building, Baltimore, Md.



**Important Power-Plant Contracts**

The decision of the Winchester & Washington City Railway Co. of Winchester, Va. to double its water-power-electrical plant at Millville, W. Va., has been followed by the awarding of important contracts. Contract for the turbines awarded to the Dayton Globe Iron Works Co., Dayton, Ohio; for the rope drive to the Dodge Manufacturing Co., Mishawaka, Ind., and for the generators to the Westinghouse Electric & Manufacturing Co. of Pittsburgh, Pa. There will be two units of water-wheels, each unit consisting of a pair of 49-inch turbines mounted horizontally and enclosed in a steel flume; each pair of wheels will develop 100 horse-power, and this will be transmitted to the generators above through a rope drive of the American continuous type. The generators will be of 500 kilowatts each.

**White Cement for High-Class Work.**

Many occasions arise for the use of a cement that is pure white and does not stain. The Berkshire White Portland Cement Co.'s plant is devoted entirely to the manufacture of a cement of this character. The materials used are pure white calcite and pure white clay, containing silica and alumina in uniform and correct proportions. The process of manufacture is the same as usually employed by Portland cement manufacturers, except that the rotary kiln is heated by an oil flame instead of using pulverized coal, which would stain the raw material and the absence of iron oxide, the place of which is taken by an additional amount of alumina. The Vulcanite Portland Cement Co., Flatiron Building, New York, now sole sales agent of this cement, has published a pamphlet entitled "Suggestions as to Uses and Where Used," which will be sent free to interested parties.

**Shelby Seamless Steel Tubing.**

The Shelby tubing is drawn without seam or weld, the method of making necessitating that it be composed of the best material, otherwise it would not withstand the process of manufacture. It is made in various sizes from 1/2 to 20 inches inside diameter, and in various thicknesses. Three different anneals are supplied—hard, medium and soft. Hard anneal is used where great rigidity and stiffness are required and where the tubes are not to be bent or manipulated in any way which would change their form; the medium is used where strength and toughness are required and where only slight or medium change of form is required; the soft is used where the tubes must be manipulated and where a decided change of form is required that demands ductile and pliable material. The manufacturer of the Shelby tubing issues booklets describing and illustrating the use of the material in various ways, and gives particulars of sizes, etc. The National Tube Co., Frick Building, Pittsburgh, Pa., is the manufacturer.

**Slate for All Purposes.**

One of the manufacturers and shippers of slate, who ships what you want from roofing slate and milled slate to slate flour, is J. K. Hower, Slatinton, Pa. Recently Mr. Hower furnished the slate on several large contracts in one of the Eastern States and several in the Southern States. In the Hower catalogue is a list of colleges and normal schools furnished with Hower slate blackboards. Not only are blackboards furnished, but orders of over 1000 feet are set on the wall by expert setters. During March Mr. Hower shipped 25,000 square feet of first-class slate blackboards, making close to 50,000 square feet shipped the first three months of this year. He now has orders for over 50,000 square feet more, and these will be filled on time. The Hower output includes slate for treads, platforms, wainscoting, floors and all kinds of sanitary plumbing, slate for electrical purposes and slate flour for linoleum, oilcloth and paint manufacturers.

**Equipping the Meramec Plant.**

The Meramec Portland Cement & Material Co., National Bank of Commerce Building, St. Louis, Mo., states it has been meeting with entire success in placing its stock and with the construction of its plant. Its fleet of barges and dredges are now being built by John Barrett & Son, Cincinnati; hoisting machinery by Lidgerwood Company, New York; unloading machinery by Hayward Company, New York; sand pumps by Morris Machine Works of Baldwinville, N. Y.; supply pumps by Dean Bros.' Steam Pump Works, Indianapolis, and Hooker Steam Pump Co., St. Louis; conveyors by J. T. & H. T. McKinlay, St. Louis, representing Caldwell & Co. of Chicago; wire cable by A. Leschen & Son Rope Co., St. Louis; structural steel work by Stupp Bros., St. Louis;

boilers by John Rohan & Son, St. Louis; lumber and pilings by Griffin Lumber Co., St. Louis; pipe and steam fittings by Materne Manufacturing Co., St. Louis; steam accessories by Walter L. Flower Steam Specialty Co., St. Louis; castings and other machinery by Curtis & Co. Manufacturing Co., St. Louis. Shipments on a portion of equipment have been made; 20 cars of material have been received at the works.

**Piping Installations Furnished Promptly.**

The Benjamin F. Shaw Company, high-pressure steamfitters, Wilmington, Del., received on April 2 an order from the Republic Iron & Steel Co., Thomas, Ala., on condition that the material be at the plant not later than April 21. This order called for 400 feet of 10-inch pipe, with heavy forged steel flanges, and several extra heavy cast-iron flanged fittings and gate valves. When the order was received the pipe (a special quality suitable for bending and flanging) was not in stock, nor were the flanges. The company immediately wired for the pipe and flanges, and inside of one week had the material ready for machine and pipe-bending work. Work was then pushed forward on the material in hand, and it was delivered at Thomas on April 20. Considering that it took 10 days to transport it from Wilmington to Thomas, it can be readily seen that this order was executed complete ready for shipment in a little over one week after receipt. The Benjamin F. Shaw Company has made a specialty of getting out work quickly for repair jobs and breakdowns. It also makes a specialty of complete piping systems in electric light and railway power plants, as well as mills and factories. Having its own pipe and machine shops, as well as the auxiliary shops that are necessary, the company can handle work of any magnitude in any part of the country with facility.

**The H. W. Johns-Manville Exhibit.**

At the exhibit at the N. E. L. A. in Chicago the H. W. Johns-Manville Company of 100 William street, New York, has spaces 15 and 16. The company is showing the new Linolite system of lighting, which consists of a series of tubular electric lamps, each one foot between centers, with a filament extending from one end to the other, and the lamps placed in the focus of a powerful aluminum reflector, the depth of which is one inch and the width one and one-half inches; a large line of Clivtor portable and switchboard instruments, including a portable lamp-testing meter; latter instrument for testing incandescent lamps and indicating the voltage, current consumed and wattage at a glance. This meter is calibrated for 150 and 300 volts, 0.75, 1.5 and 150 amperes; all shunts are self-contained; the two smaller capacity ones have universal binding posts; the instrument weighs less than 15 pounds. A switchboard and sample board are also shown, which are made of ebony asbestos wood. This material is coming into general use as an electrical insulation and fireproof material. Several forms of Noark fuse devices are shown, which include service and subway boxes of the latest types. One of these is a new Noark National electric code standard service box with conduit fittings, showing the assembling of the cables to the boxes. The following Johns-Manville representatives are attending the convention: J. W. Perry, manager electrical department, New York; H. M. Frantz, manager electrical department, Chicago; G. A. Saylor, manager electrical department, Milwaukee; T. G. Younglove, manager Chicago office; F. G. Frumveller, Chicago office, and E. B. Hatch, president Johns-Manville Company, Hartford, Conn.

**TRADE LITERATURE.****The Automatic Metal Furnace.**

The Wood & Nathan Co., No. 1 Madison avenue, New York, issues cards illustrating and describing the automatic metal furnace for cleaning, mixing and recasting slugs and type metal into ingots. This machine is intended mainly for printing establishments.

**Directory of Cement Manufacturers.**

The Association of American Portland Cement Manufacturers, 123 Land Title Building, Philadelphia, Pa., will for the first time officially publish an authentic directory of the cement manufacturers of the United States. The directory will contain the names of only such mills as are in active operation, and will be ready for distribution after June 1, 1908.

**Steam Heating Vacuum Pumps.**

Bulletin BK-810 has been issued to describe and illustrate the Blake & Knowles steam-heating vacuum pumps, both steam and power driven. These pumps embody factors

that make them efficient, economical and durable, and their types have long been affording satisfaction to exacting pump users in the industrial world. The Blake & Knowles Steam Pump Works, 115 Broadway, New York, is the manufacturer of the pumps.

**From the Draper Company.**

In Cotton Chats for March and April the Draper Company of Hopedale, Mass., calls attention to its facilities for loom repairs and presents a photograph of George Otis Draper, who has resigned as director and secretary of the company because of ill-health. The company's directors have expressed their regret at Mr. Draper's severance of his relationship and their recognition of his services as having been an important factor in the Draper Company's success.

**A Lead With a History.**

People who are interested in paints and their ingredients will find timely data presented in a leaflet just issued by Messrs. Samuel H. French & Co. of Philadelphia, Pa. The publication is entitled "A Lead With a History," and it tells of the Buck white lead, a product that for 62 years has been satisfying exacting paint users in all climates and under the most difficult conditions. That brand of lead is the product of Messrs. French & Co., who are well known as manufacturers of paints and varnish also.

**The Wood Drill Works.**

More than 16 years' experience in the manufacture of drills has enabled the Wood Drill Works to produce an equipment that is simple in construction, efficient in operation, strong and durable. The company makes a specialty of rock drills, drill mountings and kindred equipment, and its various products are described in a current illustrated publication. The publication tells all about the Wood Drill Works' rock drills for mining, tunnelling, quarrying, etc. The company's main offices and plant are at 30, 32, 34 and 36 Dale avenue, Paterson, N. J.

**Methods of Illustrating Machinery.**

Methods of illustrating machinery by Gatchel & Manning are presented in a pamphlet which that firm has issued. The publication displays the usual run of work produced by the firm's mechanical department, and is offered as fairly representative of the mechanical work ordinarily demanded by commercial requirements. Manufacturers of machinery and other products who may at any time publish catalogues or other literature requiring photographic views or other illustrations will find it advantageous to correspond with Gatchel & Manning, 27 to 41 South 6th street, Philadelphia, Pa.

**Engineer's Twin City Corliss Book.**

An interesting publication and one of value to engineers is "The Engineer's Twin City Corliss Book," issued by the Minneapolis Steel & Machinery Co., Minneapolis, Minn. It presents descriptive text and illustrations from photographs to enable anyone to readily recognize any part of the Twin City Corliss engine as built by the company. There is also presented an easy and quick method of setting Twin City valves, tables of value to all engineers, and other timely information that will assist progressive engineers in their chosen field of industrial activity. The company also makes Munsell gas engines and producers, transmission machinery, coal-handling and ore-conveying devices, iron and steel castings, etc.

**Berger Steel Office Furniture.**

Demands for durability and fireproof qualities in office furniture are being met in the production of steel furniture, now largely used throughout the country. A leading manufacturer of steel office furniture is the Berger Manufacturing Co. of Canton, Ohio. This company is now distributing its complete illustrated and descriptive catalogue of Berger products, including steel filing devices and office equipment—vertical units, steel seats (horizontal sections), cabinets, vault omnibuses, transfer boxes, waste-paper baskets, tables, chairs, etc. The Berger offerings afford every convenience of wooden equipments, and in addition give increased protection, saving of space required, strength and durability.

**Interesting Concrete Structures.**

The May Bulletin of the Universal Portland Cement Co., Commercial Bank Building, Chicago, Ill., and Frick Building, Pittsburgh, Pa., contains views of a number of interesting concrete structures of a varied character in which Universal Portland cement has been used. These include the Milwaukee & St. Paul Railway station at Columbus, Wis.; City Hall at Pensacola, Fla.; Diamond Match Co.'s factory at Oshkosh,

Wis.; approaches to Government locks at Plaquemine, La.; residence, barn, paddock and wagon shed on Pabst estate, Oconomowoc, Wis.; postoffice, Findlay, Ohio; concrete walks in Wilson Park, Minneapolis, Minn.; Agatha Hospital, Clinton, Iowa, and concrete-block apartment-house at Chicago, Ill. These structures, erected in many different parts of the country, and the fact that the output of Universal Portland cement is now about 10 per cent. of the total production of the country, are in themselves indicative of the quality and results which have followed its use.

**Universal Portland Cement.**

Few people realize the great advance which cement is making as a leading material for general construction work. Indicative of this is the 1908 catalogue of the Universal Portland Cement Co., in which is shown such varied and important construction work as bridges and viaducts to meet almost every kind of engineering requirements for railroads and other purposes, reservoirs, industrial and commercial buildings of every character, locks and dams, sidewalks, curbs and gutters, water-power construction work, culvert pipe, chimneys, coal pits, sewers, piers and light-houses. In all of these structures Universal Portland cement was used. The use of this brand of cement has so grown that during the past year two new mills have been built—plant No. 4, at Buffington, Ind., with a daily capacity of 6000 barrels, and plant No. 5, at Universal, Pa., with a daily capacity of 4500 barrels, which brings the total daily output of the company to 17,000 barrels, or about 6,000,000 per annum. Copies of the Universal catalogue and other information on cement and cement products can be obtained from the company's general offices, Commercial Bank Building, Chicago, Ill., or the branch office, 524 Frick Building, Pittsburgh, Pa.

**Valuable Information on Concrete Construction.**

The rapidly-increasing use of cement in all kinds of construction has created a large demand for more information on the part of those engaged in designing and building such work, as well as those who desire such work done. To meet this want none have been as active as the various large cement manufacturers, who are continually having compiled and published data important to every user of cement. A case in point is that of the Vulcanite Portland Cement Co., Land Title Building, Philadelphia, Pa., which has had printed in pamphlet form a number of articles dealing with various and important phases of concrete construction. Among these may be mentioned pamphlet No. 4, covering "Cracking or Hair Cracks on Concrete Surfaces;" No. 6, covering "Economic Selection and Proportion of Aggregates for Concrete;" No. 7, covering "Cement Sidewalk Paving—Suggestions as to Method of Construction," and No. 8, covering "An Artistic Concrete Residence," all of which were written by Albert Moyer, associate, American Society Civil Engineers. Copies of these pamphlets will be sent free from the main sales office in the Flatiron Building, New York.

**Sketches Wanted for School.**

The city of Wheeling, W. Va., invites sketches until June 10 for a high-school building. Address Walter H. Hall, clerk of Board of Education.

**FINANCIAL NEWS****Review of the Baltimore Market.**

Office MANUFACTURERS' RECORD, Baltimore, Md., May 13.

In the Baltimore stock market during the past week there was more activity and strength. United Railways common sold at 10 1/2; do. trust certificates, 10 1/2; do. incomes, 50 1/2 to 52; do. funding 5s, 76 3/4 to 77 1/2; do. scrip, 77 to 77 3/4; do. 4s, 84 1/2 to 86; Consolidated Gas, Electric Light & Power common, 22 1/2 to 27 1/2; do. preferred, 76; do. 4 1/2s, 78 1/4; Consolidated Gas 6s, 104; do. 5s, 100 to 100 1/2; do. 4 1/2s, 80; Seaboard Company common, 6 to 6 1/2; do. second preferred, 11 1/4 to 12 1/4; Seaboard 4s, 49 1/4 to 51, last sale at 50 1/4; do. 10-year 5s, 85 1/2 to 88 1/2; do. three-year 5s, 85 1/2 to 90; Mt. Vernon-Woodberry Cotton Duck 5s, 72 1/2 to 74 1/4; G.-B.-S. Brewing 1sts, 40 to 43 1/4; do. incomes, 13 1/4 to 14; do. stock, 3 1/2.

Bank stock sold as follows: Citizens', 31½; Mechanics', 25½ to 25; Union, 120; Maryland, 18 to 20.

Maryland Casualty was traded in at 57½ to 60; Mercantile Trust, 112 to 118; Fidelity & Deposit, 119 to 120; Continental Trust, 170.

Other securities were dealt in as follows: Atlantic Coast Line new 4s, certificates, 68 to 72; do. Connecticut 4s, certificates, 5-20s, 74½ to 80; Baltimore City Passenger 5s, 100½; Western North Carolina 6s, 106 to 106½; Baltimore City 3½s, 1940, 98½; do. do. 1980, 95½; Virginia deferred, Brown Bros. certificates, 41 to 45; Atlantic Coast Line common, 85 to 88; Carolina Central 4s, 79 to 79½; Charleston Consolidated Electric 5s, 87½; Seaboard & Roanoke 5s, 103; Baltimore Electric 5s, stamped, 84½ to 85; Norfolk Railway & Light stock, 16; Atlantic Coast Line Consolidated 4s, 89½ to 90; City & Suburban (Baltimore) 5s, 110; Norfolk Railway & Light 5s, 90; Norfolk Street Railway 5s, 104; Georgia & Alabama Consolidated 5s, 94½; Savannah, Florida & Western 5s, 108; Virginia Centuries, 91½; Maryland Telephone 5s, 88 to 89; Atlantic Coast Line of Connecticut stock, 200 to 197½; Northern Central Railway stock, 88½; West Virginia Central 6s, 103½; Baltimore, Sparrows Point & Chesapeake 4½s, 93; City & Suburban (Washington) 5s, 99; Baltimore City 5s, 1916, 106; Western Maryland Railroad stock, 4 to 4½; Houston Oil common, 7 to 7½; Maryland 3s, 1909-1914, 94½; Washington & Vandemere 4½s, 93; Anacostia & Potomac 5s, 99.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended May 13, 1908.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast.....	100	88	90
Atlantic Coast of Connecticut.....	204	210	
Georgia Southern & Florida.....	100	17	20
Georgia Sou. & Fla. 1st Pfd.....	100	81	85
Georgia Sou. & Fla. 2d Pfd.....	100	61	67½
Seaboard Company Common.....	100	64	7
Seaboard Company 1st Pfd.....	100	27	50
Seaboard Company 2d Pfd.....	100	11½	12½
United Railways & Elec. Co.....	50	104	108
Western Maryland.....	50	4½	4½

#### Bank Stocks.

Citizens' National Bank.....	10	31	
Commercial & Farmers'.....	100		100
First National Bank.....	100		130
Maryland National Bank.....	20	17	20½
Merchants' National Bank.....	100	163	
National Marine Bank.....	30	36	40
National Mechanics' Bank.....	10	25	26
National Union Bank of Md.....	100	115	120
Third National Bank.....	100	112	120

#### Trust, Fidelity and Casualty Stocks.

Baltimore Trust & Guar.....	100	275	300
Colonial Trust.....	50		26
Continental Trust.....	100	165	175½
Fidelity & Deposit.....	50	118	120
International Trust.....	100	115	
Maryland Casualty.....	25	58½	
Maryland Trust Pfd.....	100	72½	85
Mercantile Trust & Deposit.....	50	112	120
U. S. Fidelity & Guaranty.....	100	107½	115

#### Miscellaneous Stocks.

Ala. Con. Coal & Iron Pfd.....	100	64	
Con. Cotton Duck Common.....	50	5½	7½
Con. Cotton Duck Pfd.....	50	21½	24
Con. Gas, Elec. Lt. & P. Com.....	100	27½	
Con. Gas, Elec. Lt. & P. Pfd.....	100	79½	
Consolidated Coal.....	100	85	95
G. B. S. Brewing Co.....	100	3½	4
Mer. & Miners' Trans. Co.....	100		79

#### Railroad Bonds.

Albany & Northern 5s, 1946.....	93		
Atlanta & Charlotte Ext. 4½s.....	99	101½	
Atlantic Coast Line 1st 4s, 1952.....	90	90½	
Atlantic Coast Line 4s, Cfs, 1952.....	72		
Atlan. Coast Line (Conn.) 5s, Cfs.....	91	95	
Atlan. Coast Line (Conn.) 4s, Cfs.....	69		
Baltimore & Annapolis S. L. 5s.....	97	89	
Carolina Central 4s, 1949.....	79		
Chaf. Col. & Aug. 1st 5s, 1910.....	101		
Chaf. Col. & Aug. 2d 7s, 1910.....	104	107	
Col. & Green, 1st 6s, 1916.....	107	108½	
Florida Southern 4s, 1940.....	81	83	
Georgia & Alabama 5s, 1945.....	94½	95½	
Ga. Car. & North, 1st 5s, 1929.....	97½	98	
Georgia Pacific 1st 6s, 1922.....	108	111	
Ga. Sou. & Fla. 1st 5s, 1945.....	103	103½	
Maryland & Pennsylvania 4s, 1951.....	85	87	
Petersburg Class A 5s, 1926.....	106		
Piedmont & Cum. 1st 5s, 1911.....	95	99	
Potomac Valley 1st 5s, 1941.....	98	104	
Raleigh & Augusta 1st 6s, 1926.....	106		
Richmond & Danville Gold 6s, 1915.....	106½	109	
Sav. Fla. & West. 5s, 1934.....	105½		
Sav. Fla. & West. 6s.....	115		
Seaboard Air Line 4s, 1950.....	50	50½	
Seaboard Air Line 5s, 10-year, 1911.....	87	88½	
Seaboard Air Line 5s, 3-year.....	89	91	
Seaboard & Roanoke 5s, 1926.....	102½	103½	
South Bound 5s, 1941.....		99	
Southern Railway Con. 5s, 1941.....	100½		
Virginia Midland 2d 6s, 1911.....	101½		
Virginia Midland 5th 5s, 1926.....	102		
Washington Terminal 3½s.....	88½	89½	
Western Maryland 4s, 1952.....	89		
West. North Car. Con. 6s, 1914.....	105½	106½	
West Va. Cent. 1st 6s, 1911.....	102½		
WIL. Col. & Aug. 6s, 1910.....		106	

#### Street Railway Bonds.

Anacostia & Potomac 5s, 1949.....	98	90
Augusta Railway & Elec. 5s, 1940.....	95½	99
Baltimore City Pass. 5s, 1911.....	100½	
Balto., Sp. Pt. & Ches. 4½s.....	92½	93½
Central Railway 6s.....	102½	
Charleston City Ry. 5s, 1925.....	102½	103
Charleston Con. Elec. 5s, 1960.....	88	90
City & Suburban 5s (Balto.), 1922.....	111	
City & Suburban 5s (Wash.), 1948.....	98½	99½
Knoxville Traction 1st 5s, 1928.....	103	
Memphis St. Ry. 5s.....	88	90
Lake Roland Elevated 5s, 1942.....	109½	
Lexington Railway 1st 5s, 1949.....	90	95½
Macon Ry. & Lt. 1st Con. 5s, 1953.....	91	95
Norfolk Railway & Light 5s.....	90	
Norfolk Street Railway 5s, 1944.....	104	105
North Baltimore 5s, 1942.....	112½	
Richmond Traction 5s.....	102	103
United Railways 1st 4s, 1949.....	86	86½
United Railways Inc. 4s, 1949.....	51½	52½
United Railways Funding 5s.....	77½	77½

#### Miscellaneous Bonds.

Ala. Con. Coal & Iron 5s.....	83½	85
Atlanta Gas 1st 5s, 1947.....	101	
Brush Electric 5s.....	101	
Consolidated Gas 6s, 1910.....	104	104½
Consolidated Gas 5s, 1939.....	109½	110½
Consolidated Gas 4½s.....	88½	89½
Con. Gas, Elec. Lt. & P. 4½s.....	77½	78½
G. B. S. Brewing 1sts.....	42½	43½
G. B. S. Brewing 2d Inc.....	14½	15
Maryland Telephone 5s.....	88½	
Mt. Vernon-Woodby Cot. Duck 5s.....	74	75
United Elec. Lt. & P. 4½s.....	86	90

### SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending May 11.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	81	
Alken Mfg. Co. (S. C.).....	145	148
American Spinning Co. (S. C.).....	145	148
Anderson Cotton Mills (S. C.).....	106	110
Arkwright Mills (S. C.).....	65	70
Augusta Factory (Ga.).....	115	125
Avondale Mills (Ala.).....	105	108
Belton Mills (S. C.).....	106	112½
Bibb Mfg. Co. (Ga.).....	120	125
Brandon Mills (S. C.).....	110	120
Cabarrus Cotton Mills (N. C.).....	120	122½
Chiquola Mfg. Co. (S. C.).....	102	106
Clifton Mfg. Co. (S. C.).....	99½	101
Clifton Mfg. Co. (S. C.) Pfd.....	120	125
Clinton Cotton Mills (S. C.).....	98	
Columbus Mfg. Co. (Ga.).....	97½	
Courtenay Mfg. Co. (S. C.).....	95	
Dallas Mfg. Co. (Ala.).....	73	80
Darlington Mfg. Co. (S. C.).....	100	
Drayton Mills (S. C.).....	125	137½
Eagle & Phenix Mills (Ga.).....	135	146
Easley Cotton Mills (S. C.).....	70	80
Enoree Mfg. Co. (S. C.).....	85	90
Enterprise Mfg. Co. (Ga.).....	240	
Exposition Cotton Mills (Ga.).....	56	
Gaffney Mfg. Co. (S. C.).....	40	
Gainesville Cotton Mills (Ga.).....	165	
Granby Cot. Mills (S. C.) 1st Pfd.....	165	
Granville Mfg. Co. (S. C.).....	90	
Greenwood Cotton Mills (S. C.).....	115	118
Grendel Mills (S. C.).....	160	175
Henrietta Mills (N. C.).....	99	
King Mfg. Co., John P. (Ga.).....	115	
Lancaster Cotton Mills (S. C.).....	91	
Lancaster Cot. Mills (S. C.) Pfd.....	91	
Langley Mfg. Co. (S. C.).....	140	
Laurens Cotton Mills (S. C.).....	140	
Limestone Mills (S. C.).....	150	
Lockhart Mills (S. C.).....	85	
Lockhart Mills (S. C.) Pfd.....	97	
Loray Cotton Mills (N. C.) Pfd.....	79	
Marlboro Cotton Mills (S. C.).....	165	
Mayo Mills (S. C.).....	103	
Mills Mfg. Co. (S. C.).....	110	
Mills Mfg. Co. (S. C.) Pfd.....	113	
Monaghan Mills (S. C.).....	102	
Monarch Cotton Mills (S. C.).....	150	
Norris Cotton Mills (S. C.).....	115	
Orangeburg Mfg. Co. (S. C.) Pfd.....	98	
Ore Cotton Mills (S. C.).....	100	
Pacolet Mfg. Co. (S. C.).....	163	
Pacolet Mfg. Co. (S. C.) Pfd.....	95	
Pelzer Mfg. Co. (S. C.).....	165	
Piedmont Mfg. Co. (S. C.).....	165	
Poe Mfg. Co. (S. C.).....	114	127½
Raleigh Cotton Mills (N. C.).....	105	
Richland Cot. Mills (S. C.) Pfd.....	55	
Roanoke Mills (N. C.).....	175	
Saxon Mills (S. C.).....	128	
Sibley Mfg. Co. (S. C.).....	59½	63
Spartan Mills (S. C.).....	140	145
Springfield Mills (S. C.).....	100	
Trilon Mfg. Co. (Ga.).....	140	
Tucapau Mills (S. C.).....	195	
Union-Buttalo (S. C.) 1st Pfd (S. C.).....	60	
Victor Mfg. Co. (S. C.).....	120	125½
Warren Mfg. Co. (S. C.).....	92	93½
Warren Mfg. Co. (S. C.) Pfd.....	105	
Washington Mills (Va.).....	22	
Washington Mills (Va.) Pfd.....	100	110
Whitney Mfg. Co. (S. C.).....	140	
Williamston Mills (S. C.).....	107	
Wiscasset Mills (N. C.).....	130	135
Woodruff Cotton Mills (S. C.).....	122	130
Woodside Cotton Mills (S. C.).....	102½	105

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending May 11.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	80	
Aetna Cotton Mills (S. C.) Pfd.....	80	
Alken Mfg. Co. (S. C.).....	82	
American Spinning Co. (S. C.).....	145	
Anderson Cotton Mills (S. C.).....	95	100
Ardena Mills (S. C.).....	105	
Arkwright Cotton Mills (S. C.).....	65	70
Augusta Factory (Ga.).....	110	
Avondale Mills (Ala.).....	103	107
Belton Mills (S. C.).....	120	125
Brandon Mills (S. C.).....	40	45
Brogan Mills (S. C.).....	125	
Cabarrus Cotton Mills (N. C.).....	115	125
Chidwick Mfg. Co. (S. C.) Pfd.....	103	
Chiquola Mfg. Co. (S. C.).....	103	107
Clifton Mfg. Co. (S. C.) Pfd.....	101	
Clinton Cotton Mills (S. C.).....	100	120
Columbus Mfg. Co. (Ga.).....	94	98
Courtenay Mfg. Co. (S. C.).....	100	
Dallas Mfg. Co. (Ala.).....	90	95
Darlington Mfg. Co. (S. C.).....	80	85
D. E. Converse Co. (S. C.).....	112	
Drayton Mills (S. C.).....	100	
Eagle & Phenix Mills (Ga.).....	130	135

Easley Cotton Mills (S. C.).....	145	150
Enoree Mfg. Co. (S. C.).....	70	82
Enoree Mfg. Co. (S. C.) Pfd.....	100	102
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	225	
Gaffney Mfg. Co. (S. C.).....	75	
Gainesville Cotton Mills (Ga.).....	60	
Glenwood Mills (S. C.) Cotton.....	122	63
Gluck Mills (S. C.).....	90	98
Granby Cot. Mills (S. C.) 1st Pfd.....	50	
Granville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	90	94
Grendel Mills (S. C.).....	115	117½
Hartsville Cotton Mill (S. C.).....	115	120
Henrietta Mills (N. C.).....	165	
Inman Mills (S. C.).....	100	110
King Mfg. Co., J. V. (Ga.).....	97	102
Lancaster Cotton Mills (S. C.).....	109	
Lancaster Cot. Mills (S. C.) Pfd.....	92	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	150	162
Limestone Mills (S. C.).....	140	150
Lockhart Mills (S. C.).....	75	83
Lockhart Mills (S. C.) Pfd.....	101	101
Loray Cotton Mills (N. C.) Pfd.....	90	100
Marlboro Cotton Mills (S. C.).....	90	90
Mills Mfg. Co. (S. C.).....	105	
Molloy Mfg. Co. (S. C.).....	100	
Monaghan Mills (S. C.).....	112	
Monarch Cotton Mills (S. C.).....	98	102
Newberry Cotton Mills (S. C.).....	127	
Ninety-Six Cotton Mills (S. C.).....	115	120
Norris Cotton Mills (S. C.).....	117	122
Odel Mfg. Co. (N. C.).....	90	90
Olympia Cotton Mills (S. C.).....	70	80
Orr Cotton Mills (S. C.).....	100	105
Pacolet Mfg. Co. (S. C.).....	165	
Pacolet Mfg. Co. (S. C.) Pfd.....	101	104
Pelzer Mfg. Co. (S. C.).....	167	175
Piedmont Mfg. Co. (S. C.).....	170	
Poe Mfg. Co., F. W. (S. C.).....	125	130
Saxon Mills (S. C.).....	122	130
Sibley Mfg. Co. (S. C.).....	140	148
Spartan Mills (S. C.).....	140	148
Trilon Mfg. Co. (Ga.).....	132	140
Tucapau Mills (S. C.).....	200	
Union-Buttalo (S. C.) 1st Pfd.....	20	25
Union-Buttalo (S. C.) 2d Pfd.....	20	25
Victor Mfg. Co. (S. C.).....	130	
Warren Mfg. Co. (S. C.).....	90	97
Warren Mfg. Co. (S. C.) Pfd.....	102	107
Washington Mills (Va.).....	20	
Washington Mills (Va.) Pfd.....	100	105
Watts Mills (S. C.).....	105	
Whitney Mfg. Co. (S. C.).....	140	
Williamston Mills (S. C.).....	105	
Wiscasset Mills (N. C.).....	127	
Woodruff Cotton Mills (S. C.).....	124	130
Woodside Cotton Mills (S. C.).....	110	

### General Electric Report.

The sixteenth annual report of the General Electric Co. shows that the profits for the fiscal year ended January 31, 1908, were \$6,586,653. There was paid in dividends \$5,183,614, so that there was carried to surplus \$1,403,039, making a total surplus of \$16,513,836. The total sales billed during the year were \$70,977,168, and the total orders received were \$59,301,040. The orders received during the first six months of the year increased 22 per cent. as compared with the corresponding period of the previous year, but in the last half they decreased 23 per cent. as compared with the previous year, and since November there has also been a heavy decrease of orders received as compared with the past three years. The total number of separate orders and contracts received during the year was 237,006, an average of 4558 per week. In the 10-year period ended January 31, 1908, the sales billed increased from \$12,396,003 to \$70,977,168, an average of 19.8 per cent. per year. The increase in 1907 was 18.2 per cent. as compared with 1906.

The report notes that the use of electrical apparatus for industrial purposes is extending rapidly, and large purchases from the company were made during the year for completely equipping mills with turbine and engine-driven generators for lighting and power, and with motors of standard and special design for driving machinery of every description.



